

Beyond Assumptions

How humanitarians make operational decisions

Leah Campbell and Paul Knox Clarke



LEADERSHIP

 **ALNAP**

ALNAP is a global network of NGOs, UN agencies, members of the Red Cross/ Crescent Movement, donors, academics, networks and consultants dedicated to learning how to improve response to humanitarian crises.

www.alnap.org

About the authors

Leah Campbell is a Senior Research Officer at ALNAP, Paul Knox Clarke is former Head of Research at ALNAP.

Acknowledgements

First and foremost, the authors acknowledge the 55 participants who contributed to this study through their submission of diary entries and participation in interviews, in particular the 32 who completed the study in its entirety. The time and insight you gave to this process makes this report possible – thank you. We would also like to thank the wide range of individuals and organisations who supported and enabled this research including: the members of our advisory group (Alexandra Levaditis – World Vision, Jonathan Beloe - IRC, Chris Pain – Concern Worldwide, and M. Ehsanur Rahman - NAHAB), the various organisations who hosted or supported briefing sessions (including Oxfam and Coast Trust in Bangladesh, HelpAge and WHO in Ukraine, Concern in Kenya, UNICEF in Nigeria, Welthungerhilfe in Turkey, and War Child in Lebanon), and colleagues within the ALNAP Secretariat and ODI who reviewed drafts, supported field research and turned this report from a Word document to the colourful, engaging report you now see. Thanks to the advisory group and Alice Obrecht for their helpful edits/review. We are thankful to Elinor Mair-Jones who undertook all the statistical analysis, and helped us make sense of it, and to Grace Evans, Amal Jaber and Lewis Clough for their research assistance at various points throughout. Thank you all – we couldn't have done this without you.

The views contained in this study do not necessarily reflect those of the ALNAP Members.

ALNAP would like to acknowledge the financial support of USAID in carrying out this initiative.

Suggested citation

Campbell, L. and Knox Clarke, P. (2019) *Beyond Assumptions: How humanitarianism make operational decisions*. ALNAP Study. London: ODI/ALNAP.

ISBN: 978-1-910454-99-2

© ALNAP/ODI 2019. This work is licensed under a Creative Commons Attribution-non Commercial Licence (CC BY-NC 4.0).

Design by Soapbox, www.soapbox.co.uk

Copyediting by Niki Lee

Bibliographic editing by Renée Goulet

Communications management by Maria Gili, Hannah Bass and Cara Casey-Boyce

Typesetting by Anil Shamdasani

Cover photo credit: Derek Bruff/flickr

Contents

Abbreviations and acronyms	4
Executive summary	5
<hr/>	
1 Introduction	9
<hr/>	
2 Research objectives and methods overview	11
2.1 Objectives and questions	11
2.2 Introduction to the method	11
2.3 Limitations	13
<hr/>	
3 Humanitarian decision-making: the who, what, how long and how many	17
3.1 What do we mean by decisions/decision-making?	17
3.2 What decisions are being made?	18
3.3 Who is involved in decision-making?	19
3.4 How long does decision-making take?	20
3.5 How many decisions are decision makers making per day?	21
<hr/>	
4 Under what conditions are decisions made?	25
<hr/>	
5 The decision-making process	33
5.1 Identifying that a decision is required	33
5.2 Collecting information	39
5.3 Making the decision	42
5.4 Considering criteria	47
5.5 Communicating the decision	49
5.6 Implementing the decision	50
5.7 Reflecting on the decision/building experience	51

6 Key findings	57
6.1 What are the effects of significance, urgency, uncertainty and stress on decision-making?	58
6.2 Analysis, intuition or procedures – what works, and when?	62

7 Further findings and themes	79
7.1 The role of groups and consultation in humanitarian decision-making	79
7.2 The role of experience	83
7.3 The role of familiarity	84
7.4 The role of contextual understanding	87

8 Conclusions and recommendations	95
8.1 What is the nature of humanitarian decision-making? (What decisions are made? How are decisions made? Under what conditions?)	95
8.2 Do certain decision-approaches achieve higher quality decisions overall?	97
8.3 Do certain decision approaches achieve higher quality decisions under specific conditions?	98
8.4 Recommendations: how can these decision-making approaches be used most effectively by humanitarians?	99

The bibliography for this study is available at <https://www.alnap.org/help-library/beyond-assumptions-biblio>

List of tables

Table 1: Types of decisions submitted for this study	18
Table 2: Reactive, assigned and proactive decisions	35
Table 3: Summary of key findings around decision-making approaches	62

List of figures

Figure 1: Percentage of decisions made by individuals and groups	19
Figure 2: The length of time each submitted decision took	20
Figure 3: Key figures about the conditions in which decisions are made	26
Figure 4: How decision makers knew a decision was required	34
Figure 5: Which decision-making approaches were used to make different kinds of decisions	46
Figure 6: Degree to which procedures were used for each decision category	46
Figure 7: Rate of decision implementation	51
Figure 8: Length of time each decision took, separated by decision-making type	68
Figure 9: Participants' level of humanitarian experience	84
Figure 10: Amount of time participants have worked in their current response context (at the time decisions were submitted)	88

Abbreviations and acronyms

CHS	The Core Humanitarian Standard on Quality and Accountability
DFID	Department for International Development (UK)
INGO	international non-governmental organisation
NDM	naturalistic decision-making
NNGO	national non-governmental organisation
RCRC	Red Cross and Red Crescent
RM	recognition/metacognition
SOP	standard operating procedure
UN	United Nations

Key to design features



In brief

Executive summary

The ability to make good decisions, particularly under difficult circumstances, is fundamental to effective humanitarian response. Despite receiving frequent critique in humanitarian evaluations, there has been relatively little academic study on decision-making in humanitarian response. This research explores the nature of humanitarian contexts, the different types of decisions that they require, and the most suitable approaches to making these decisions at the country or field level. It seeks to identify concrete recommendations for humanitarian organisations and individual decision makers.

This study has used a mixed methods approach combining literature review, an app-based diary method, interviews and questionnaires. Recruited from 8 operational contexts, 55 decision makers began the study and 32 completed it, submitting a total of 1,035 decisions. 42% of participants came from the country in which they were working at the time of the diary study, with 58% being international staff. 60% worked for international non-governmental organisations (INGOs), 25.5% for national non-governmental organisations (NNGOs), 7% for the United Nations (UN), 5.5% for national Red Cross Red Crescent (RCRC) societies and 2% for donors. A full method is available in the [annex](#).

There is a great deal of variety in humanitarian decision-making, including the sorts of decisions which get made. Interestingly, only 19% of the decisions submitted in this study were about response options and targeting, with the remainder covering a wide range of decisions from whether to share information with donors and whether to follow procurement procedures to who to hire in a certain role. Operational decision-making is largely social, with 81% of decisions involving consultation or a group process. The length of the decision-making process can vary from under an hour (11%) to more than a month (10%).

Existing literature suggests that humanitarian decisions are largely significant, urgent, uncertain and stressful. This study affirms that decisions taken by operational decision makers do tend to have significant consequences (78%) and are taken under urgent time pressures (80%). However, only 38% were identified as taking place in uncertain conditions, and only 49% where the future was also uncertain. Decision makers reported feeling stressed at the time of decision-making 47.5% of the time.

The decision-making process starts with the recognition that a decision is required – a step which often gets overlooked. Just 8% of the decisions

submitted in the study were proactive, where decision makers recognised or anticipated an emerging situation where a decision was required. Experienced decision makers, and those faced with familiar circumstances, were more likely to be proactive. Path dependency and tunnel vision, lack of information/clarity about the nature of the problem, lack of time or competing priorities and lack of role clarity all have the potential to exacerbate a ‘reactive mindset’, which puts decision makers at risk of causing delays or failing to make decisions entirely.

Overall for the decision makers in this study, information was more used and more useful for understanding the current situation rather than for considering the efficacy of potential responses. This makes sense given the types of decisions submitted to the study, which were largely those unlikely to require consultation of a formal evidence base (such as decisions about coordination and HR). While decision makers value the use of information, the study found no relationship between increased information collection and the perceived quality of the decision. Given the importance of informing humanitarian response with high-quality evidence in operational decision-making, the findings raise a number of questions: What is understood as evidence? What types of evidence are relevant for different types of decisions? How can research evidence be disseminated so that it is most useful for operational decisions where it can add value?

“The circumstances within which decisions are made influences the quality of those decisions – the more urgent a decision became, the better the perceived quality”

There are three main decision-making approaches: analytical methods, which aim to identify the best course of action from a range of options; naturalistic methods, which use prior experience to choose a good course of action given the circumstances; and procedural, where decisions are guided by use of organisational procedures and protocols. Regardless of how a decision has been made, communication about the decision is an important step, helping the decision maker to gain support/buy-in. Reflection following the decision helps the decision maker to enhance their future understanding.

The circumstances within which decisions are made influences the quality of those decisions – the more urgent a decision became, the better the perceived quality. Decisions made in situations of less uncertainty were perceived as better than those made in high uncertainty. The more uncertain a decision became, the more likely a decision maker would be to seek additional information, though this didn’t appear to improve the quality of the decision. Stress also had an influence – decisions rated as either high or low stress were more associated with quality than those with medium levels of stress. These factors appear to be responsible for variations in quality between group versus individual decision-making.

The study suggests that, while analytical approaches are preferred by decision makers, overall the quality of these decisions were perceived as marginally lower in comparison to other approaches. There are a number of possible explanations – for example, there may be other factors outside the scope of the study influencing the statistical relationship between decision-making approach and quality. It may be that analytical approaches are being used in circumstances for which they are not suited (such as, where the situation is very urgent and/or uncertain), or that the analytical approaches being used are not strictly ‘textbook’ and lack some elements which, if used, could improve the quality of these decisions, particularly thorough option generation and a clear set of criteria with which to compare options.

Decision makers were less comfortable using their intuition to make decisions – called naturalistic decision-making, or NDM. However, when they did, these decisions were perceived to be of higher quality than those made using an analytical approach. Naturalistic decisions are well-suited to urgent situations familiar to the decision maker. Decision makers should test their assumptions when using NDM to ensure the experience they’re relying in is appropriate to the context, and can use forecasting to help them do this.

In 50% of decisions, procedures were used as written or adapted. Procedures were less likely to exist and be used in situations which were less familiar to the decision maker (suggesting these situations are also less familiar to the organisation). With respect to quality, there was no statistical relationship between those decisions where protocols and procedures were used and those where they were not.

Participants in the study had varying levels of humanitarian experience – with 40% having more than ten years of experience. 76% of decisions were familiar to decision makers, and these familiar decisions were perceived as slightly better quality. Those with more experience tended to encounter unfamiliar situations less frequently. Participants also had variable amounts of experience living in the country where they were working, with 42% national staff and 58% international. Understanding the context has a significant positive influence on decision-making, in particular on NDM.

Having answered questions about the nature of humanitarian decision-making and approaches/conditions which influence the quality of decisions, the study concludes with a number of concrete recommendations including the need to recognise the value of NDM, improving analytical decision-making by following good practice, making a conscious choice about which decision-making approach best fits the situation, making evidence more accessible to decision makers, increasing proactive decision-making, for organisations to support individuals to improve their decision-making, and further work on how to make decisions in uncertain, unfamiliar circumstances where neither analytical, naturalistic or procedural decision-making appears to be particularly effective.

A large, light teal, stylized number '1' graphic is positioned in the background, centered vertically and horizontally. The number has a curved top and a thick vertical stem.

Introduction

1 Introduction

The ability to make good decisions, particularly under difficult circumstances, is fundamental to effective humanitarian response. The importance of good decision-making has emerged as a theme in ALNAP's previous work on humanitarian leadership (Knox Clarke, 2014) and coordination (Knox Clarke, 2016; Knox Clarke and Campbell, 2015). Within humanitarian evaluations, decision-making receives regular criticism – for being too slow (Darcy, 2016a; Adams et al., 2015; Agulhas Applied Knowledge, 2015; Murray et al., 2015; Quasami, 2015; Sanderson et al., 2015; UNICEF, 2015); disconnected from strategy (Hayles, 2010); opaque (Ambroso et al., 2016; Murray et al., 2015); and unaccountable (Darcy, 2016b; Agulhas Applied Knowledge, 2015; Clarke et al., 2015). Despite this critique, relatively little academic study has been made on decision-making in humanitarian response. Work that has been done points to gaps in understanding – in particular, a lack of knowledge about what decisions are made, by whom and how (D'Onofrio, 2016; Maxwell et al., 2013; Hayles, 2010), and about the conditions in which decisions are made and what influence these have on the decision-making process (Heyse, 2013).

Seeking to address these gaps, this research explores the nature of humanitarian contexts, the different types of decisions that they require, and the most suitable approaches to making these decisions at the country/field level. It seeks to identify concrete recommendations for humanitarian organisations and individual decision makers.

Following this introduction, [Section 2](#) briefly introduces the research method (which is found in full in the [annex](#)). [Section 3](#) then describes decision-making – who is making what kind of decisions, how long does it take them and how many do they make? [Section 4](#) considers to what extent decisions are urgent, significant, uncertain, stressful and familiar. [Section 5](#) then explores the decision-making process, from the identification of the need to make a decision to reflection once the decision has been made. [Section 6](#) outlines key findings of the research, in particular around which decision-making methods are most useful and effective given the circumstances. [Section 7](#) presents further findings around the role of groups, and how experience, familiarity and contextual understanding influence decision-making. Finally, [Section 8](#) summarises a response to the initial research question and puts forward recommendations.

A large, light teal number '2' is centered on a dark teal background. The number is composed of a semi-circle at the top and a rectangular base at the bottom, with a circular cutout in the middle of the upper part.

Research objectives and methods overview

2 Research objectives and methods overview

2.1 Objectives and questions

This research aims to:

- Add to the evidence base and develop the theory by documenting the nature of operational decisions and decision-making in humanitarian response at the country/field level
- Test new hypotheses (see the [annex](#) for a full list) about the relevance/usefulness of different decision-making approaches in humanitarian response, and identify new hypotheses where appropriate.

The overall questions for this research study are as follows:

1. What is the nature of humanitarian decision-making? (What decisions are made? How are decisions made? Under what conditions?)
2. Do certain decision approaches achieve higher quality decisions overall?
3. Do certain decision approaches achieve higher quality decisions under specific conditions?
4. How can those decision-making approaches be used most effectively by humanitarians? What needs to change – for organisations, information managers, individual decision makers, leadership teams, etc.?

2.2 Introduction to the method

In order to answer these questions, this study has used a mixed methods approach combining literature review, an app-based diary method, interviews and questionnaires. A brief description of the method is outlined below. For full details, including the limitations of the method, see the [annex](#) and the forthcoming methods note to accompany this study.

The research began with a literature review (Campbell and Knox Clarke, 2018) which examined 40 humanitarian evaluations and 60 academic articles and grey literature. The literature review established a broad understanding of the types of decisions that humanitarians are making at country level, the range of conditions under which these decisions are made, and the decision-making approaches commonly associated with emergency and humanitarian contexts in the literature. The literature review also recognised the relatively little existing research on humanitarian decision-

making, particularly when humanitarian action was compared with other areas of emergency and disaster management. These findings informed the development of the objectives, hypotheses and research questions for the rest of the study.

With the support of an advisory group, the research team selected a diary method, which allowed the collection of detailed information on the decisions made by a cohort of humanitarian leaders working at the country level over a period of time, remotely, and in real-time. An app (CrowdLab) was used to collect the diary entries according to a structured format, which allowed participants to input both qualitative and quantitative data. After a half-day briefing session, 55 recruited participants took part in the study, and were asked to submit 30 decisions each.

“This study has used a mixed methods approach combining literature review, an app-based diary method, interviews and questionnaires”

Participants were recruited from the following humanitarian contexts: Lebanon, Jordan, Turkey, Bangladesh, Kenya, Somalia, Nigeria and Ukraine. 42% of participants came from the country in which they were working at the time of the diary study, with 58% being international staff. 60% worked for INGOs, 25.5% for NNGOs¹, 7% for the UN, 5.5% for national RCRC societies and 2% for donors. 40% of participants were female and 60% were male. Participants held a range of job titles, but were all responsible for decision-making within their position. 40% of participants had more than ten years of experience in the humanitarian sector, and only 11% had less than two years of experience – see [Figure 9](#) for further detail on this.



A view of Zaatari refugee camp in Jordan. Several participants were working in the Syria regional response during the study period. Photo credit: UN photo/Mark Garten.

In an attempt to randomise the decisions included, participants were asked to submit the first decision made in the morning and the first in the afternoon (participants did not stick to this – see the [annex](#) for further detail). Between June and December 2018, a total of 1,035 decisions were submitted with 32 decision makers ‘completing’ the study by submitting 16+ decisions each. Once the diary entries had been completed, these 32 participants were each interviewed twice and completed a number of additional questionnaires.

The additional questionnaires included a set of questions asked retrospectively to allow participants to rate the perceived quality of each decision that they had made. The research team conducted a literature review to inform the methodology used to assess the quality of the decisions submitted. A set of seven questions was asked about each decision submitted, from which the researchers established an overall decision quality score. A full list of the questions asked and the justification for this approach is in the [annex](#).

The interviews were transcribed and coded using MaxQDA. Some of the qualitative responses from the diaries were categorised by the research team – these and the quantitative responses were then analysed by a statistician to identify whether relationships existed in the data.

2.3 Limitations

There are a number of limitations to the study. The study is based on decisions submitted by 55 individuals – not a representative sample – with varying levels of participation and consistency in responses. All data points, including the quality score, have come from participants themselves – a method which is supported by literature, but is admittedly subjective. To emphasise this, throughout this paper refers to the ‘perceived quality’ of the decision rather than an objective known quality (which would be impossible to determine). There are also challenges and limitations relating to the statistical analysis used – with each individual entering multiple decisions, more advanced techniques had to be used to control for patterns which may be attributable to individual decision makers. In some cases, responses were gathered around a few of the categories in the data. This makes it difficult to see meaningful patterns. Several of the relationships examined (for example, between the type of decision being made and the decision-making approach used) did not show any patterns of note. It is impossible to know whether this pattern simply does not exist, or whether, with more data points in each category, patterns may have emerged. There may also be other influencing factors, which were not accounted for in the study. Each of these is discussed in detail in the methodological [annex](#).



In brief:

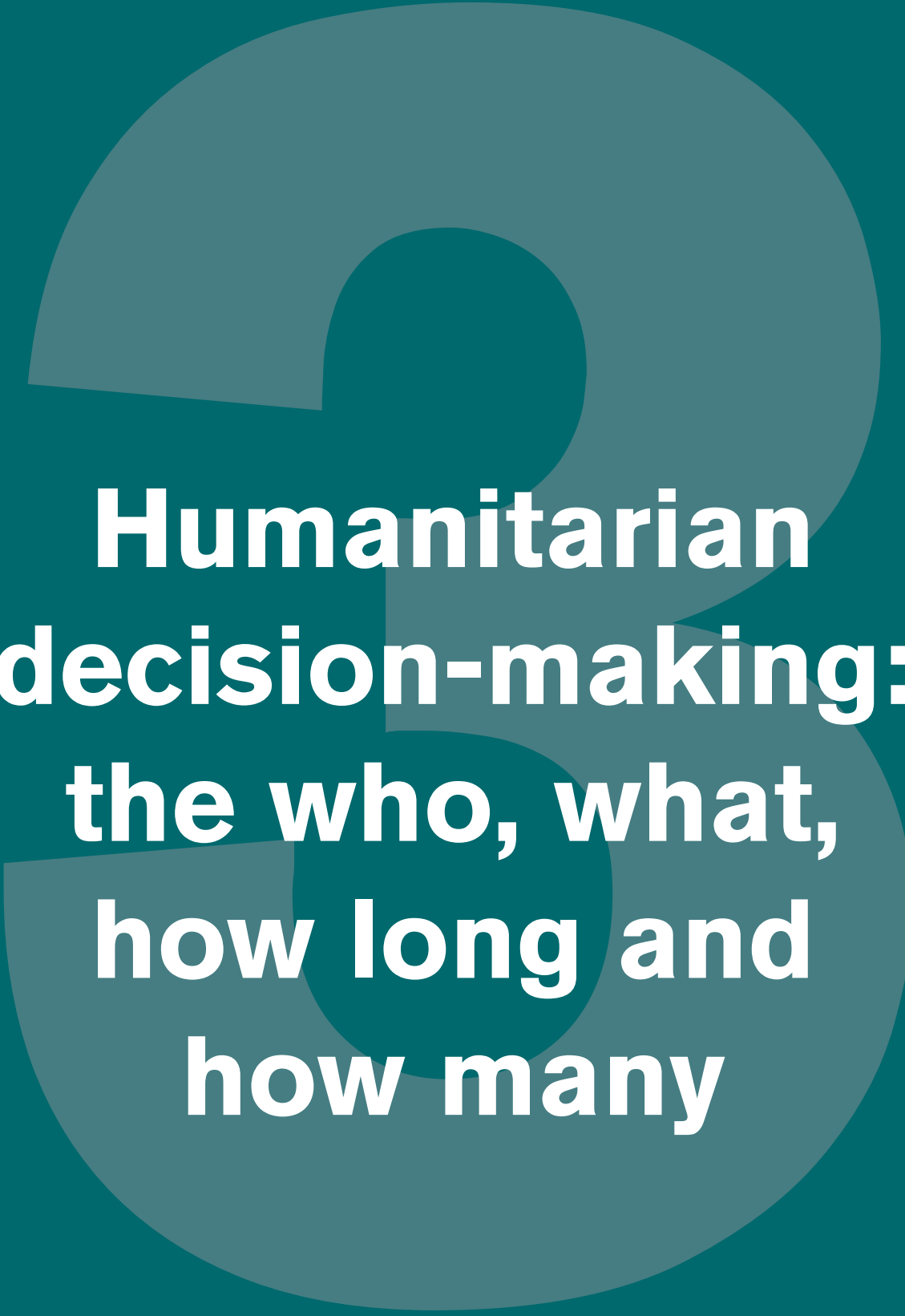
- Previous research and evaluations identify operational decision-making as an area in need of improvement.
- This research adds to the evidence base by documenting the nature of decisions and decision-making at country/field level, and examining the relevance/usefulness of different decision-making approaches.
- A mixed methods approach was used combining literature review, interviews and an app-based diary study.
- 55 decision makers submitted 1,035 decisions to the study.
- There are a number of limitations to the study including around sample size, subjectivity of responses and the number of data points used.
- A full method is available in the [annex](#).



Drivers and pedestrians consider their options after finding themselves in gridlocked traffic in Dhaka, Bangladesh. Photo credit: ~Pyb/flickr.

Endnotes for this chapter

- 1 However, only 3/11 NNGO participants completed the study, and 8/11 only submitted one decision before dropping out.



**Humanitarian
decision-making:
the who, what,
how long and
how many**

3 Humanitarian decision-making: the who, what, how long and how many

3.1 What do we mean by decisions/decision-making?

A major challenge in studying decision-making is that there is no agreement of what the term actually means. On one hand, some view decision-making as a singular event, a moment when a choice is made. Others see decision-making as a process, where it is difficult to distinguish one exact decision moment. Those who see decision-making as an event tend to focus primarily on the identification of and selection between a set of options (Hobbs et al., 2012; Aldunate et al., 2005; Kowalski-Trakofler and Vaught, 2003; Kalra et al., 2014). Those with a more process orientation focus on an ongoing cycle of problem solving: gaining experience, testing what works and building upon what is then known to the decision maker (Patel et al., 2002; Gralla et al., 2016; Ortuño et al., 2013; Mendonca et al., 2001; Powell et al., 2018).

“Some view decision-making as a singular event, a moment when a choice is made. Others see decision-making as a process, where it is difficult to distinguish one exact decision moment”

In this study, research participants explained the difficulty in pinpointing an exact decision moment. In their words, ‘Sometimes I discovered that it was extremely difficult to specifically identify a specific decision that I had made, rather than a larger process as a result of which this decision was generated’.

In addition, participants gave examples whereby one decision would often be inextricably linked to others. One explained, ‘There are some decisions you need to make before you make the final one ... you find yourself with a decision within decisions’, and another said, ‘Sometimes you make one decision ... [and] you realise that a decision that you made earlier on ... doesn’t work based on the decisions you’ve [since] made and you sometimes have to go back to the beginning’.

Of course, not all the decisions examined in this study were described in this way. Some were much more linear. However, participants often described how making one decision was taken into another. This is discussed further in [Section 7.2](#). The following section explores the different aspects of the humanitarian decision-making process observed in this research.

3.2 What decisions are being made?

After reviewing the existing literature at the start of this research project, a number of decision types were identified (Campbell and Knox Clarke, 2018). The research study affirms these categorisations and adds one more. Humanitarians in the field are making decisions about the following things:

Table 1: Types of decisions submitted for this study

Type of Decision	Examples	% of decisions submitted in study
Response options	Delivery method, type of intervention, project timing	13%
Targeting	Who will receive assistance, where to respond, how criteria are determined	6%
Information	Gathering information, whether and how to share information especially with donors and coordination bodies	11%
Working together	Whether to work with other actors, whether to participate in meetings	19%
Go/no go, scale of response	To start/end response/projects, to scale up/down, to apply/not apply for funding	13%
Staffing/resource allocation	Staff numbers, allocation of staff, hiring staff, dealing with disciplinary issues	23%
Logistics and ways of working	Procurement and payments, travel arrangements, security procedures, time prioritisation	15% (not identified in literature review)

A lot of the current discourse particularly that related to the use of evidence in decision-making (Blanchet et al., 2018) focuses on decision-making about what to do (response options). However, the decisions made by participants in this study represent a wide range of problems faced by humanitarian leaders, day to day. The decisions humanitarians are making include everything from whether to start a new response activity, to how to deal with a staff disciplinary concern, prioritise their time, whether to share resources or information with another organisation, and everything in-between.

3.3 Who is involved in decision-making?

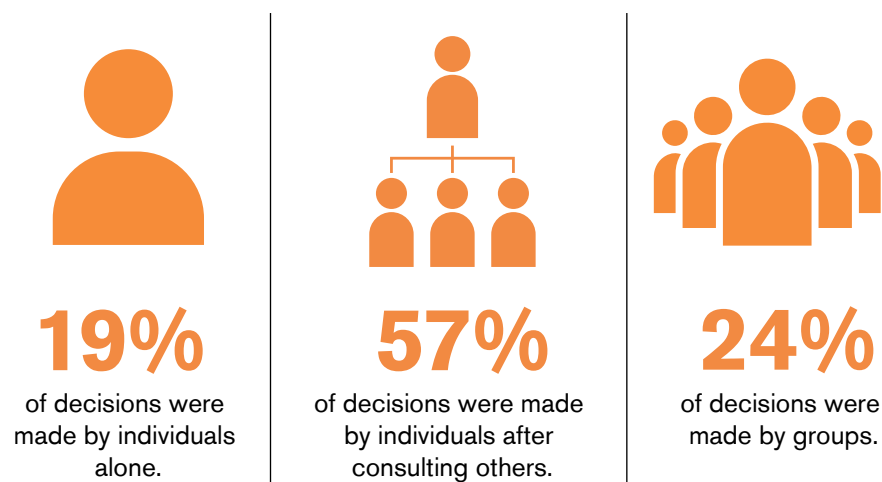
Due to the nature of the study, the 55 participants are not a representative sample of all humanitarian decision makers.¹ However, it may still be interesting to consider some features about them. In terms of gender, 40% of study participants identified as female and 60% male.²

While gender undoubtedly shapes the experiences of humanitarian decision makers, analysis did not show a statistically significant relationship between the decision maker's gender and any of the factors we examined, including the amount of experience they had,³ the way they perceived the quality of specific decisions,⁴ the perception the decision maker had of the overall quality of their decision-making,⁵ the use of a particular decision-making approach,⁶ whether decisions were proactive or reactive,⁷ or whether decision makers involved others or made decisions entirely on their own.⁸

“Both interviews and diary submissions highlight the social nature of most decision-making processes”

As well as considering the main ‘decision maker’, it is important to consider who else is involved when decisions get made – see [Figure 1](#). Participants were asked to indicate who was involved in making the decision. In total, 19% of decisions were recorded as being made by individuals entirely on their own. A further 57% were decisions made by an individual who had consulted with others, either individually or as a group. Finally, 24% of decisions were made jointly, by groups. [Section 7.1](#) explores the role of the group in decision-making.

Figure 1: Percentage of decisions made by individuals and groups



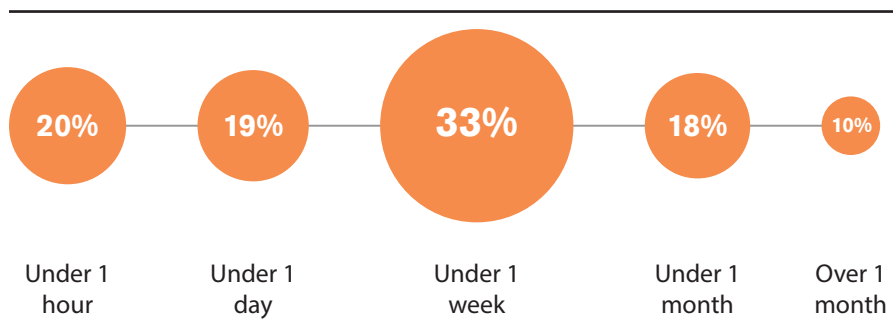
Participants also indicated that 59% of decisions involved some degree of coordination with other organisations in the decision-making process, with the remaining 41% of decisions involving no coordination with other organisations. For our participants, at least, the reality of humanitarian action is multi-agency and (broadly) cooperative.

Overall, both interviews and diary submissions highlight the social nature of most decision-making processes. Even those decisions recorded as being made by an individual appear in many cases to have been influenced by others. For example, one decision recorded as being made by an individual alone was made following discussions within the organisation and implementing partner and on obtaining written testimony from others involved in the situation. In another, the decision maker ‘asked the HR management about the best practice’. [Section 7.1](#) further explores this aspect of humanitarian decision-making, including whether there were differences in quality between those decisions made by individuals versus those made by groups, and by one or multiple organisations.

3.4 How long does decision-making take?

To better understand the decision-making process, research participants were asked to identify the length of time between realising a decision needed to be made, and the eventual making of the decision.⁹ The results are presented in [Figure 2](#) below.¹⁰ 20% of decisions took less than one hour – within this figure, 9% took less than 10 minutes and the remaining 11% took between 10 minutes and one hour. 19% of decisions took between one hour and 24 hours, 33% took between one to seven days, 18% took between one to four weeks and finally 10% took over one month. The longest decision-making process took one year, the second longest nine months. Most decisions within this final category took between two and three months.

Figure 2: The length of time each submitted decision took





Both interviews and diary submissions highlight the social nature of most decision-making processes. Even those decisions recorded as being made by an individual appear in many cases to have been influenced by others. Photo credit: UN Photo/Sylvain Liechti.

The length of time taken to make a decision is fairly equally distributed between the type of decision being made (for example, whether the decision was about response options or working together) with no clear patterns emerging. There are more observable differences when comparing decision-making approaches, which are discussed in detail in [Section 6.2](#). There are also differences depending on who makes the decision, with individuals alone far likelier to make quick decisions.¹¹ This is discussed further in [Section 7.1](#).

No relationship was found between the length of time taken to make a decision and the overall perceived quality of that decision, the type of decision being made,¹² or the decision maker's perception of whether the decision was made in an appropriate amount of time.¹³

3.5 How many decisions are decision makers making per day?

In the literature, several authorities reference the large number of decisions humanitarians may have to make in a short space of time – a problem of decision density (Comes, 2016; Cosgrave, 1996).

To understand the extent of this pressure on decision makers, research participants were asked to indicate the number of decisions they made on two random days throughout the study.¹⁴ The average number of decisions made per day was three, with an overall range from zero to ten decisions per day. The widest disparity between two responses from the same person was an individual who recorded making two decisions one day, and ten on another.

These numbers appear to suggest decision density is not always very high, though this should be taken with caution. None of the study participants were in the initial phase of a major scale-up/beginning of a response during the research period (June–December 2018), though there were scale-ups throughout monsoon season in Cox’s Bazaar, Bangladesh and the outbreak of cholera in Maiduguri, Nigeria.

In addition, a number of participants noted that sometimes, decisions get made ‘almost unconsciously ... without really thinking about them too much or at all’, so participants may have under-reported. In addition, given that 61% of decisions take longer than a day, decision makers may be juggling a much larger number of decision-making processes at any given point, beyond just those that get made on a given day.



In brief:

- Humanitarian professionals are making decisions on a wide variety of topics: decisions in the study included everything from whether to start a new response activity to how to deal with a staff disciplinary concern, to whether to share resources with another organisation.
- Humanitarian decisions are often group-based or collaborative: over 80% of decisions were either made jointly or by individuals consulting with others.
- Not all humanitarian decisions are made quickly: 20% of decisions were made within an hour, a further 19% were made within a day, 33% within a week, 18% within a month and 10% took several months to a year.
- The individual decisions considered in the study did not generally occur in isolation – most were part of longer decision-making processes, rather than being one off events.

Endnotes for this chapter

- 1 See the [annex](#) for more detail about participant selection.
- 2 These figures are true both for the entire 55 participants (22 female, 33 male) and the 32 who ‘completed’ the study and interviews (13 female, 19 male) suggesting men and women dropped out at an even rate.
- 3 This was examined using Fisher’s exact test which yielded a p-value of 0.868.
- 4 A regression model with quality score as outcome and gender as predictor, adjusting for multiple decisions per decision maker, yielded a likelihood ratio test p-value of 0.16.
- 5 This was examined using Fisher’s exact test which yielded a p-value of 0.87.
- 6 A regression model with type of decision as outcome and gender as predictor, adjusting for multiple decisions per decision maker, had a likelihood ratio p-value of 0.77.
- 7 A regression model with whether the decision was reactive/proactive/assigned as outcome and gender as predictor, adjusting for multiple decisions per decision maker, had a likelihood ratio p-value of 0.8.
- 8 A regression model with who made the decision as outcome and gender as predictor, adjusting for multiple decisions per decision maker, had a likelihood ratio p-value of 0.37.
- 9 Participants submitted this information as open text, which researchers categorised.
- 10 These figures are out of a total 1006 decisions. 1035 non-excluded decisions are included within the study, however 29 decisions had responses that were impossible to categorise.
- 11 This is confirmed by an ordinal logistic regression, with amount of time taken to make the decision as outcome and who made the decision as predictor, adjusting for multiple decisions per decision maker, which yielded a likelihood ratio p-value of 0.03.
- 12 No clear pattern was observed when using descriptive statistics, in particular a mosaic plot.
- 13 This is confirmed using a regression model with quality as outcome and amount of time taken to make decision as predictor, adjusting for multiple decisions per decision maker, yielding a likelihood ratio test p-value of 0.12.
- 14 32 participants answered both times, and a further six answered once.



**Under what
conditions are
decisions made?**

4 Under what conditions are decisions made?

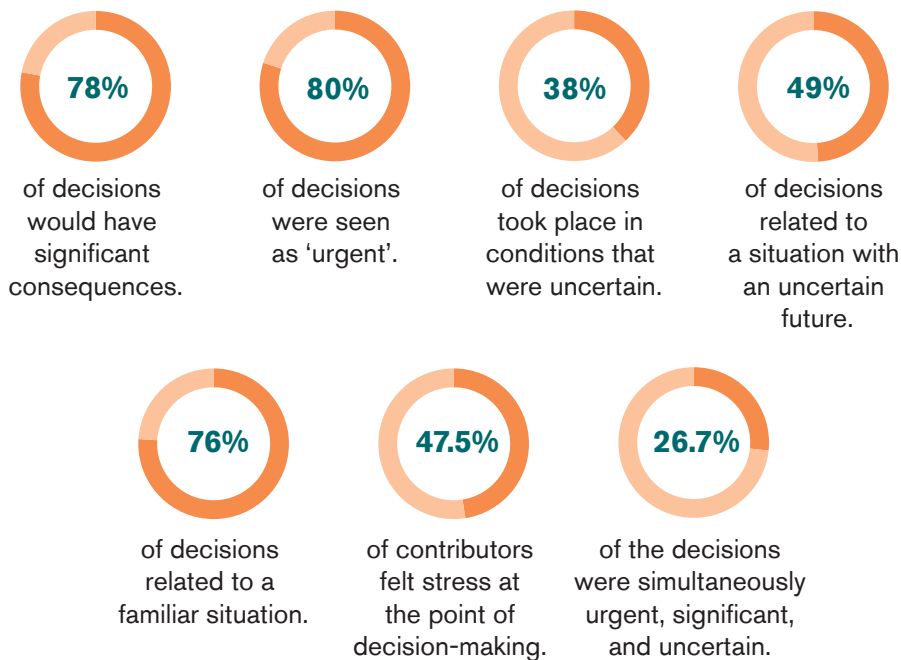
The fairly limited literature describing humanitarian decision-making tends to focus on decisions that are extremely important (in terms of saving lives); that are taken under significant time pressure (Oxford Policy Management, 2016; UNICEF, 2015; Zhang et al., 2002) and that occur in environments where the current situation is not fully understood and the future is hard to predict (Hobbs et al., 2012; Metcalfe et al., 2011). Although some authorities remind us of the breadth and diversity of issues that decision makers face (Cosgrave, 1996; Ortuño et al., 2013), it can be easy to assume that humanitarian decisions are predominantly significant, urgent, uncertain and stressful.

The diary methodology used in this study provides some insight into the degree to which these assumptions are correct. While it does not give a full set or an entirely representative sample of all decisions made, it does allow a fuller understanding of the decisions that humanitarians are actually taking on the ground.

“Although some authorities remind us of the breadth and diversity of issues that decision makers face, it can be easy to assume that humanitarian decisions are predominantly significant, urgent, uncertain and stressful”

The results suggest that a large proportion of humanitarian decisions are important: contributors reported that 78% of the decisions recorded would have significant consequences (4-6 on a six-point scale), with 30% of decisions rated as ‘very significant’ (6 on a six-point scale). In interviews, a number of contributors suggested that they had not chosen decisions randomly (as requested), but had tended to include the more significant decisions in their diaries.¹ Nevertheless, these results still suggest that making important decisions is a daily occurrence for many humanitarians. In some cases, the significance of the decision related to the consequences it would have for people affected by the crisis: ‘People are dying. People need assistance here. People are in too much need’. However, decisions relating to a number of other issues (such as staff security, funding and staffing) were also seen to be very significant.

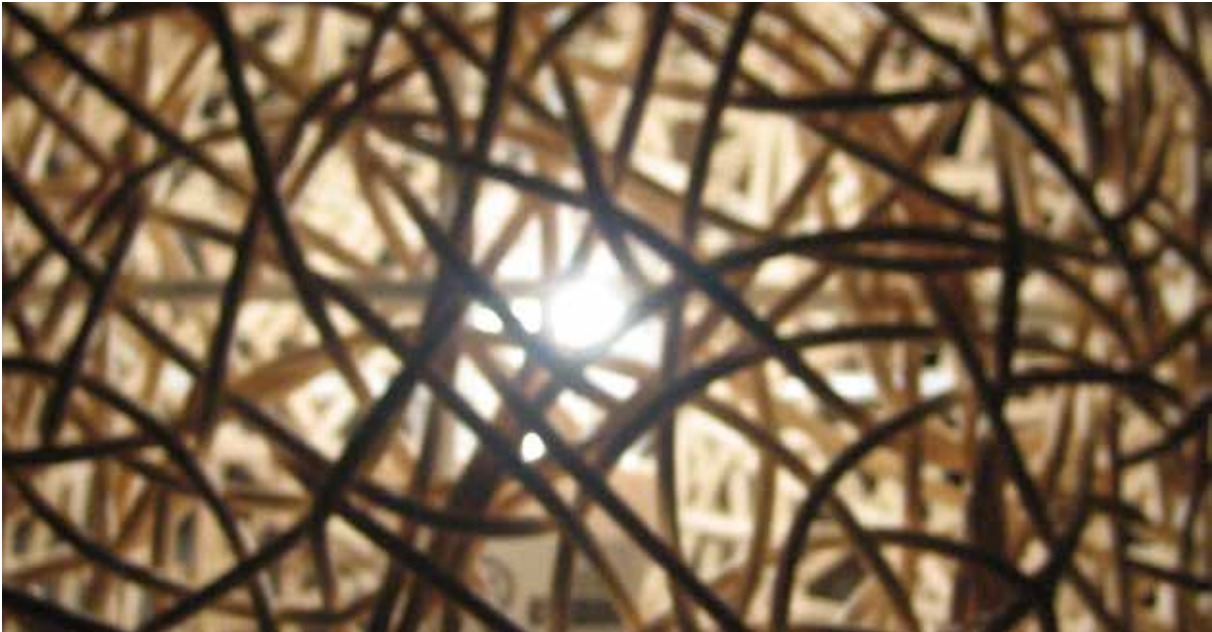
Figure 3: Key figures about the conditions in which decisions are made



Similarly, 80% of the decisions recorded were seen as 'urgent', with one third (33.3%) rated as very urgent. In the words of one contributor: 'If you delay, either lives can be lost, or systems can be broken ... or the relationship with the authorities, or with the partners, or even with the donor, can be destroyed'. At the same time, a number of decision makers pointed out that 'a lot of what we talk about as ... something that is urgently to be done, is actually bad planning'. Where this happens, decision makers can end up in a cycle of reactive decision-making, and can struggle to proactively identify emerging situations – this is discussed further in [Section 5.1](#).

Several participants also explained that it was not only the situation on the ground that made decisions urgent, but also deadlines around expenditure. If, as often happened, funding came late, or activities such as procurement were delayed, then humanitarian leaders found themselves pushed to make decisions on how to spend funds in a hurry. This 'we must act immediately' attitude has also been noted in the literature (Colombo and Checchi, 2018). It is also worth noting that 'urgent' does not necessarily mean 'immediate'. As outlined above, while the majority of decisions were urgent, only 39% of decisions were actually made in less than 24 hours, and only 9% of decisions were made in under 10 minutes.

So far, the assumptions that are made about humanitarian decisions seem to be supported by the decision diaries. The results for uncertainty, however, were more surprising. We might have expected the majority of decisions to be taken in conditions where the current situation was not fully known and understood (present uncertainty), and/or where the future was hard to predict (future uncertainty). Indeed, some interviewees felt that a degree of uncertainty is inherent in humanitarian work: 'There is just so far



Although some interviewees felt that a degree of uncertainty is inherent in humanitarian work, only 45% of the decisions submitted for this research were reported to have taken place in uncertain or very uncertain conditions. Photo credit: loumurphy/flickr.

you can, or I can, know about the situation and how it will evolve’. However, only 38% of decisions were reported as taking place in conditions that were uncertain (rating 4–6 on a six-point scale) and only 7% were ‘very uncertain’ (scored as 6 on the same scale). Similarly, contributors indicated in slightly less than half (49%) of the decisions that the way the situation would evolve in the future was uncertain and in only 12% of decisions was the future ‘very uncertain’. A number of decision makers found this unsurprising, explaining that decisions differed, and also that the situation differed from one country to another. A contributor in Ukraine explained how they found the situation there ‘thankfully predictable’, and the sentiment was echoed by decision makers in Lebanon.

“Perhaps the most important element to be aware of is how diverse the circumstances are within which decisions get made: there is no one decision-making scenario”

A sense of uncertainty about the future – about how the situation would evolve – may also have been mitigated, in many cases, by a degree of familiarity. Contributors were asked to indicate, for each decision, ‘how familiar was the decision situation to you?’: for 76% of the decisions, the situation was familiar, and for 31% it was ‘very familiar’ (rated 6 on a six-point scale). In interviews, many contributors explained that decisions were familiar because they had addressed the same issues before: these were ‘repeat decisions’ that allowed the decision maker to build up ‘accumulative experience’. By experiencing the results of a decision multiple times, the future (at least with respect to how the decision will play out) becomes more certain. There appeared to be some difference of opinion between

contributors as to whether decisions had to be exactly the same to inspire familiarity, and the degree that familiarity was transferable from one situation to the next. Some felt that decisions (or at least some decisions) were almost context-independent, and that experience of a decision in one place transferred well to other places. Others suggested that ‘most of the time, most of the decisions we make, are driven by context’, and so it was not enough to have made the same type of decisions before – familiarity depended on making the same type of decisions in the same context. It is, of course, entirely possible that some of the situations were ‘misdiagnosed’ (that decision makers assumed they were familiar when they were different from previous situations in important ways). There is no hard evidence to support this (as the data collection method was subjective, and so participants would not know what they didn’t know). However, the findings around tunnel vision (see [Section 5.1](#)) suggest that such misdiagnosis is possible in at least some cases.

Local authorities consult with one another while testing water chlorination levels in Cite de Dieu in Port-au-Prince.
Photo credit: UN Photo/Marco Dormino.



The final assumption often made about humanitarian decisions is that they are stressful. However, among the decisions recorded for this study, contributors reported feeling stress at the point of making the decision slightly less than half the time (47.5% of decisions were rated as 4-6 on a six-point scale). Only 8% of decisions fell into the highest stress category. In interviews, a number of contributors suggested that stress is a very individual thing, and that people will be affected differently by different stressors.² This was underlined by the wide variety of factors that the interviewees cited as causing stress. However, within these factors there were a number of fairly common, shared elements that were described as contributing to stress: lack of knowledge or information; delays to planned activities, or lack of time to complete activities; insecurity; and working in coordination with other agencies were all mentioned multiple times. These findings were supported by the statistical tests, where there was a statistically significant relationship between increased levels of stress and decreased familiarity³ with the decision situation, increased levels of uncertainty⁴, and increased levels of urgency.⁵ As might be expected, individuals with more experience of humanitarian work tended to feel lower levels of stress overall when making decisions than their colleagues with less experience.⁶

What, then, are we to conclude about the decisions that humanitarian country directors, representatives and senior programme staff have to take? Perhaps the most important element to be aware of is how diverse the circumstances are within which decisions get made: there is no one decision-making scenario. While literature tends to assume that humanitarian decisions are predominantly urgent, significant, and uncertain, in fact, only 26.7%⁷ of the decisions recorded fit within all three criteria.



In brief:

- Humanitarian decisions are often described as being 'life-saving' (or at least very important); made under time pressure and in circumstances where the current situation is not fully understood, and the future is hard to predict.
- Some findings supported this generalisation – participants described 78% of decisions as having significant consequences and 80% as urgent.
- However, only 38% involved uncertainty about the current situation, and 49% had uncertainty about how the situation would evolve.
- 76% of decisions were described as being familiar to the decision maker.
- Less than half of decisions (47.5%) were recorded as being stressful.

Endnotes for this chapter

- 1 Many decision makers did submit insignificant decisions, including, for example, whether to attend one meeting or another.
- 2 Stress occurs when ‘a demand exceeds the regulatory capacity of an organism, particularly in situations that are unpredictable and uncontrollable’ (Starcke and Brand, 2012: 1232).
- 3 A multinomial regression with stress as outcome and familiarity score as predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of less than 0.0001.
- 4 Two separate multinomial regression models, with stress as outcome and each of current uncertainty and future uncertainty in turn as predictors, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of less than 0.0001 in each case.
- 5 This is observed through descriptive statistics as, due to the nature of the data, multinomial regression models were not feasible. This is likely due to the presence of too many ‘zeros’ in the data (where, for example, no decisions were rated as 6/6 for stress and 1/6 for urgency, which creates gaps that are not conducive to statistical tests/models).
- 6 This is observed through descriptive statistics and the use of mosaic plots.
- 7 26.7% (276/1035 decisions) were scored between 4-6/6 on all of the following scales: urgency, current uncertainty, future uncertainty and significance. 2.2% of all decisions scored 6/6 on all four scales.

Many contributors explained that decisions were familiar because they had addressed the same issues before: these were 'repeat decisions' that allowed the decision maker to build up 'accumulative experience'. By experiencing the results of a decision multiple times, the future (at least with respect to how the decision will play out) becomes more certain.
Photo credit: UN Photo/Ilyas Ahmed.





**The
decision-making
process**

5 The decision-making process

There are a number of common aspects of the decision process. This includes: the initial recognition that a decision is required, information collection, using different decision-making approaches, the criteria considered when making the decision, communication to build support, implementation of the decision and finally, reflection on the decision process.

“The first – and often overlooked – step in the decision-making process is the recognition that a decision is required in the first place”

5.1 Identifying that a decision is required

Before getting into how to make the decision, the first – and often overlooked – step in the decision-making process is the recognition that a decision is required in the first place. A review of existing literature on emergency decision-making emphasised the importance of this step, and raised four issues:

1. Difficulty in recognising the need to make a decision at a particular point in humanitarian response contexts, particularly due to the uncertainty that comes from working in these situations (Campbell and Knox Clarke, 2018; Hobbs et al., 2012; White and Turoff, 2010; Patel et al., 2002).
2. The need for a good understanding of the problem that requires solving by humanitarian decision makers, to avoid trying to solve the wrong thing (Campbell and Knox Clarke, 2018; Gralla et al., 2016; Mitroff and Betz, 1972).
3. How the problem is presented to the decision maker (how the issue is ‘framed’) can influence the decision-making process (Campbell and Knox Clarke, 2018; Lu, 2017; Patel et al., 2002).
4. Humanitarian organisations often create boundaries to help them manage uncertainty, by specialising, proceduralising and standardising (Obrecht with Bourne, 2018), which can also impact decision-making. Generally, humanitarian organisations are set up to react rather than to proactively adapt (Obrecht, 2019b).

Within the decision diaries completed for this study, participants were asked to identify how they knew a decision was required.¹ As illustrated in [Figure 4](#), 57% of decisions were reactive, where the decision maker responded to a situation or information presented to them. 35% of decisions were assigned, where decision makers were asked or informed by someone else, or by the nature of their job role/organisational procedure, to make the decision. Finally, 8% of decisions were proactive, where decision makers recognised or anticipated an emerging situation as one where a decision was required. Participants were also asked retrospectively how well they had understood the decision problem – 93% felt they had understood quite well (5–6 on a six-point scale), with those with more overall experience and those from the country where they were working reporting that they understood the decision situation ‘very well’ marginally more often.

“Highly experienced decision makers were more likely to make proactive decisions than decision makers with less overall experience”

Unsurprisingly, decision makers tended to be more reactive when faced with unfamiliar circumstances² and more proactive when they understood the nature of the problem/situation,³ and when making decisions entirely on their own or after consultation with others.⁴ Highly experienced decision makers were more likely to make proactive decisions than decision makers with less overall experience.⁵

Figure 4: How decision makers knew a decision was required

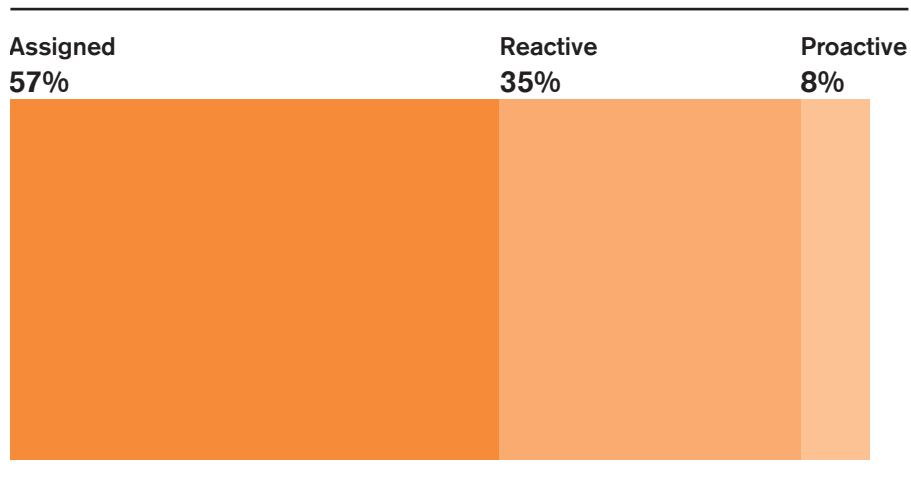


Table 2: Reactive, assigned and proactive decisions

Type of decision	Reactive decisions	Assigned decisions	Proactive decisions
<p>Description</p>	<p>Where the decision was made in response to a situation which had already happened. For example, there was a security incident, someone else did something, something changed, or the decision maker was presented with new information.</p>	<p>Where someone or something else led to the decision maker knowing a decision needed to be made. For example, someone else directly or indirectly told or asked the decision maker to make a decision, where this was known due to organisational standard operating procedures (SOPs) or standard job responsibilities, or where a previous decision led to further decisions needing to be made.</p>	<p>Where the decision maker, through their experience and insight, recognised a potential emerging problem and made a decision in anticipation before it caused difficulty.</p>
<p>Quotes from the diaries</p>	<p>'A decision was required given the level of needs and sector identified hot spots' 'The atmosphere in the office was hostile and in order to clear things this decision had to be made' 'After realising security threat in the area' 'The initial activities were rescheduled, and we needed to adapt'</p>	<p>'I knew the decision was needed because it's an annual activity done every year in such an emergency setting' 'For any meeting I guess there has to be a decision about who attends it so it's a sort of instinct of an automatic decision' 'I was approached by the Project Team that sought my advice' 'Because this is a standard operating procedure when we get new funding allocations'</p>	<p>'I just knew that we have to get out of that situation...maybe being in this position before helped' 'Based on my previous experience working on different project locations in different hazard specific locations, I raised this caution' 'I anticipate that [situation] will come so I'd like to be ready for it' 'It was not a request from outside. It was rather us deciding to be proactive'</p>

When interviewed, several participants discussed a related challenge – of recognising the need to make a decision but postponing it. One explained, ‘I sort of understood the decision was needed but delayed with it or postponed. [I] didn’t want to make the decision’. Another said, ‘Some decisions are not easy ones or pleasant ones and then it’s rather ignoring it as long as possible ... you’re just hoping the problem disappears by itself’. Others felt like sometimes, delays occurred because it was hard to know what to do: ‘You feel like a decision should be made but you can’t really put your finger on what exactly to change or what decision to make to improve the situation or find a way forward’. Interviewees described these moments with regret and noted the potential negative outcomes when this happened.

5.1.1 Missed decisions

Interviews with participants suggested that they often experienced a reactive mindset, with decisions being made once a problem had presented itself (rather than in proactive anticipation). The impact of this is that for some, decision-making becomes a situation of playing catch-up, where ‘you find almost on a weekly basis you are taking different decisions ... you are making these new decisions because of the conditions at that very moment. This can result in very negative consequences. One decision maker described a situation where, unfortunately, a proactive decision had not been made which resulted in an escalation of need. The participant explained, ‘That made me to see that if [back] then I had taken a decision in that community ... the number of death cases would have been less’. They explained they were reluctant to act on early information without knowing how the situation would unfold, and therefore ‘did not take action’ proactively.

“Participants suggested that they often experienced a reactive mindset. The impact of this is that for some, decision-making becomes a situation of playing catch-up”

With so many reactive and assigned decisions, it is important to ask whether some necessary decisions get missed. Interviewees were of two minds. Some struggled to recall any moments where this might have happened and felt ‘at the end of the day, the decision is always made if there is a situation that requires a decision’. Others felt that missed decisions ‘happen all the time’ and ‘probably every day there’s something that I or someone should’ve dealt with more decisively a few weeks ago or few months ago’. Some felt that this particularly happens for larger, strategic decisions – ‘Mostly we regret a strategic decision not being made on time or at all’.

Overall, most interviewees were able to recall situations where decisions had not been made, either at all or within an appropriate period of time.

This suggests there is a real possibility that decisions are often missed. Interviews with participants identified four main reasons for this:

1. Path dependency and tunnel vision

Interviews with participants suggested they sometimes experienced ‘path dependency’, acting by default – a frequently observed phenomenon in humanitarian contexts (Darcy et al., 2013; Knox Clarke and Darcy, 2014). In another recent ALNAP study, programme teams were often found to be collecting information that they never ended up using (Obrecht, 2019b) rather than making decisions about what information would actually be needed, and similar observations have been made about humanitarian coordination structures which tend to focus more on collecting information than on making use of it (Knox Clarke and Campbell, 2015). Participants described expecting things to go one way and then later realising ‘that there was additional aspects, outside of what I had expected, that certainly popped up and turned out to be a major factor’.

Box 1: The influence of organisations on decision-making

Humanitarian organisations themselves shape the framing of potential decisions, which can help decision makers to react quickly but may also reinforce path dependency and tunnel vision. Maxwell et al. (2013) explain that humanitarian situations can be framed in a certain way by organisational mandate/policies, which is based on experience, and so can be problematic when decision makers are faced with new situations. When the frame doesn't fit, irrelevant information can be gathered, and wrong decisions can be made (Campbell and Knox Clarke, 2018).

One participant explained that ‘there is always some kind of identity of the organisation and the mandate of the organisation that also many influence some of the decisions’. Some felt this influence could be restrictive – ‘It sometimes impacts your decision-making in terms of, this is just how our organisation works. So you might not even have a choice’.

Decision makers in the study explained that ‘humanitarians follow a lot of SOPs and that guides what decisions you can make or not’. Participants also described the influence of donor procedures and wishes – ‘Your decision-making is also in terms of how we can fulfil what they want to do because we need their funding’. While protocols and procedures can be helpful for decision-making (see [Section 6.2.3](#)), they can limit a decision maker's ability to notice a decision is required if leaders feel they are supposed to blindly follow what's been set out for them. While path dependency can help humanitarian decision makers focus in a chaotic environment, it can also have a negative influence on decision-making, particularly when the need to make proactive decisions gets overlooked.

Interviewees were also sometimes led by tunnel vision – the general human tendency to go along with existing mental models, to be unable to see things outside of these cognitive filters even when new evidence challenges these (Knox Clarke and Darcy, 2014; Darcy, 2009; Maxwell et al., 2013; Knox Clarke, 2013). Despite being surrounded by it, humanitarians often have a low tolerance for uncertainty and struggle to recognise changing circumstances (Obrecht with Bourne, 2018), and realise new decisions need to be made. One participant explained that, ‘In these situations it’s really difficult for you to make any decision when you were already on one track and ... the situation has changed, and you don’t know what is next and you’re just sitting and waiting for the situation to develop’. In the review of how participants knew a decision was required, less than 2% of decisions were made in response to something changing.

2. Lack of information/clarity about the nature of the problem

Humanitarian decision makers often have to navigate situations without sufficient relevant information, both about the current situation and how it might evolve. One explained that where ‘data is scarce ... in most cases that is the reason ... we miss out decisions that we’d have taken initially’. This lack of clarity can be around the nature of the problem itself, particularly around the scale of the problem. Another said, ‘Things get thrown [at you] all the time and you don’t take them as important at the moment’. This can be compounded by the fact that many humanitarian organisations struggle to effectively monitor the situation on an ongoing basis and so miss the opportunity to make use of ongoing monitoring information which could inform their understanding of the situation/problem at hand (Obrecht with Bourne, 2018; Campbell, 2018; Warner, 2017; Sundberg, 2019).

3. Lack of time/ competing priorities

Humanitarian decision makers often manage many tasks simultaneously. One decision maker described this as feeling like having to ‘jump from [one] ice float to another and that you never have enough time to get to the clarity of thought that it [decision-making] deserves’. The result is that decision makers may miss taking proactive decisions as they are preoccupied with all of the reactive ones. One explained, ‘Sometimes you may be very busy, and you prioritise other activities or tasks ... later on you realise when problems arise, that’s when you see a decision was required’.

4. Lack of role clarity

Several interviewees pointed out situations where they had proactively identified the need for a decision but ultimately did not make a decision because they felt it was not their responsibility to do so, or there was a ‘grey area’ around ‘who the person who needs to make the decision is’. One participant shared a particular example, whereby they had recognised that the current levels of congestion of displaced people in a camp could lead to problems later on. They explained, ‘I feel like a decision is required

but ... I'm not sure who should take the decision, at what level'. Another participant suggested that sometimes this confusion is exacerbated by fear of making the wrong decision – 'In this sector, [people] don't like to take responsibility for something that can go terribly wrong'. This can be felt acutely, particularly if the potential proactive decision would involve committing time or financial resource, which might turn out to be unnecessary.

5.1.2 Proactive decision-making

Despite the large number of reactive and assigned decisions highlighted in the study, there were also examples of decisions submitted that were proactive and anticipatory. Interviews revealed situations where individuals attempted to improve their situation awareness by consciously looking around, paying attention to things which made them uneasy, and aiming for continuous improvement through reflection and learning.

In one example, a decision maker talked about a proactive decision to initiate post-distribution monitoring – 'Initially [the] tendency of aid workers [in this response] were, let's just distribute and count the number. [However], I was feeling something [I needed] to know that may help us to design these kinds of distribution later on. I was feeling this is the missing gap in that whole response, that any kind of ... post-distribution monitoring was absent'.

Decision makers who were able to make proactive decisions described the importance of thinking ahead – 'As a manager or as a leader, I have to think of the changing situation. What will be the challenge for me in upcoming days? If I can something forecast ... I can prepare myself'. They also described the importance of reflection and learning, which helped prepare them to understand future situations and identify the need to make a decision proactively.

5.2 Collecting information

The literature provides different views on the relative value of information collection in making decisions (Danielsson and Ohlsson, 1999; Van de Walle and Comes, 2015; Darcy et al., 2012; Cosgrave, 1996; Zhang et al. 2002; King, 2005). The study participants reflect this range of opinion. Some decision makers described how, particularly in urgent or uncertain circumstances, incorrect or irrelevant information could negatively impact decision-making by 'distracting' or confusing. One participant gave the example of 'one decision that we made which we then changed ... we received from a partner some pieces of information which was not thoroughly checked ... we made a decision based on [that] ... it was not the right one'.

Researchers hypothesised that increased use of information would improve the quality of the decision. However, the study's statistical analysis found no relationship – more information does not appear in general to improve the quality of decisions, nor does it make decisions worse.⁶

However, overwhelmingly, research participants felt that collecting information was an important part of decision-making.

Decision makers felt that information:

- **Gave them confidence** – ‘All these little pieces of information help paint a picture and give a sense of comfort and confidence in a decision, if not 100% certainty’.
- Was helpful in their ability to **justify decisions** made – ‘If something goes wrong, if you’re not able to document that you did everything you could to obtain all the information ... You need to do it because you will be held accountable for it. So first and foremost, [information collection] is a self-preservation and protection measure’.
- Improved their **situation awareness**⁷ and understanding of what decisions would be an appropriate fit – ‘there is always a part of the situation that you don’t know, and you need to get some basic information’.

What is interesting here is how few decision makers explained the quest for information as being about making a better quality decision. Information appeared to be as important – if not more – in providing the decision maker comfort and space to act, as it was in making the ‘right’ decision.

It is important here to distinguish between two different types of information: evidence about what works (efficacy of this or that intervention) and information about needs/situation/context (Darcy and Knox Clarke, 2013; Colombo and Checchi, 2018). Overall for the decision makers in this study, information was more used,⁸ and more useful, for understanding the current situation rather than for considering the efficacy of potential response options, which makes sense given the types of decisions submitted to the study.

“Overall for the decision makers in this study, information was more used, and more useful, for understanding the current situation rather than for considering the efficacy of potential response options”

As mentioned earlier, the literature suggests that seeking more information in uncertainty is often futile, as the nature of uncertainty means that some things are simply impossible to know (Hobbs et al., 2012), and too much information can be a distraction (Sorensen and Mileti, 1987). Unlike the calculations and modelling which can be established to determine risk, uncertainty involves a large number of unknowns that cannot be accurately quantified (Campbell and Knox Clarke, 2018). Seeking information in these contexts, then, may seem like a waste of time. However, the study results show that there is a relationship between use of information and uncertainty,⁹ whereby decision makers in fact increase their information seeking when faced with uncertainty.¹⁰

During interviews, decision makers reiterated the value of information collection despite the uncertainty. One explained, ‘I think that the more information I know, the more possible scenarios I understand but I still have no idea which scenario is going to happen’. They felt that rather than knowing whether the situation would evolve into A, B, or C, they expand their understanding to incorporate potential options that also include D and E.

There were of course times where decision makers were unable to get the information they wanted. Decision makers described access constraints, difficulty getting hold of people, lack of time and uncertainty around the reliability of information as particular challenges.

Decision makers in the study largely relied on social sources of information – discussions with colleagues, reliable informants, field and HQ staff and so on. This emphasises the social nature of humanitarian decision-making highlighted elsewhere in this report. It is also in line with a recent study of UK Department for International Development (DFID) decision makers, which found that decision makers, lacking time to ‘sift through’ and extract relevant information, often ‘gather this info through personal and professional networks’ (Powell et al., 2018:7), that is, ‘socially’.

“Further work on evidence should consider not just how evidence can support decision-making about efficacy and response options, but how, and what kinds of, evidence can inform the wide range of decisions being made”

Decision makers also relied on more structured assessments/monitoring processes for information, although generally structured information gathering was restricted to specific types of questions. The most rigorous, structured and evidence-led decisions were those about need and targeting, where there were established processes for gathering and making use of information through assessments and monitoring. Apart from their use of structured information on needs, very few participants described use of documented lessons or research (the hard data – often described as ‘evidence’). Only 3.4% of the submitted decisions which sought information mentioned looking for best practice/lessons/research efficacy data.

Another explanation for why efficacy evidence is not much used brings us back to the types of decisions humanitarians are making day to day. For many decisions submitted in this study, ‘hard data’ on efficacy isn’t relevant, because of the nature of the decision being made (for example, how to deal with an HR situation, or whether or not to partner with a certain organisation). These decisions are relational and so not dependent on efficacy data/evidence. It is possible that, as many decisions do not benefit from evidence, humanitarians are not habituated to look for evidence, and so fail to do so for those decisions where it would be useful.

Given the importance of informing humanitarian response with high-quality evidence (Obrecht, 2017; de Geoffroy et al., 2015; Knox Clarke and Darcy, 2014) in the humanitarian sector, these findings raise questions, including: What is understood as evidence? What types of evidence are relevant for different types of decisions? How can research evidence be disseminated so that it is most useful to operational decision-making? While previous ALNAP research acknowledges the role of various kinds of evidence (ibid.), much of the current focus on evidence appears to centre around efficacy (Blanchet et al., 2018) at the expense of other potential types of evidence and decisions. Further work on evidence should consider not just how evidence can support decision-making about efficacy and response options, but how, and what kinds of, evidence can inform the wide range of decisions being made. Further work may also be needed to understand the quality of information being sought, as this was out of scope for this study. Finally, those seeking to improve the use of evidence in decision-making should take account of the entire decision-making process, and consider how evidence can be of use at different points, rather than focusing on one decision moment.

5.3 Making the decision

Within the decision-making process, the literature identifies several different methods for actually making the decision. In the literature review that formed the first part of this research (Campbell and Knox Clarke, 2018), three broad approaches stood out: the analytical, naturalistic, and procedural. Each approach covers a number of distinct methods, which share important characteristics.

“Analytical decision methods aim to identify the best possible course of action. To do this, decision makers identify a range of options for action, and then analyse information to assess the potential performance of each option under future conditions”

Analytical decision methods aim to identify the best possible course of action – that is, the course of action that will create the most value according to defined criteria (such as financial return on investment, or measurable health or education outcomes) (Lipschitz et al., 2001; Choo, 2002). To do this, decision makers identify a range of options for action, and then analyse information to assess the potential performance of each option under future conditions (Heyse, 2013). These conditions are modelled based on available evidence; in many cases a variety of different possible conditions are considered, so that the decision options can be tested under each (Kwakkel et al., 2016; Woodward et al., 2014). Analytical approaches follow a structured process (Boardman et al., 2017; Leigh, 2016)

and rely on (largely quantitative) information (Patel et al., 2002), and so are well suited to computerisation – they form the basis of much decision-support software. This structure and use of information, as well as the aim to identify the best decision, the fact that they are designed to eliminate individual subjectivity and bias, and their performance in laboratory test conditions, have led many people to see analytical approaches as the ‘gold standard’ of decision-making (Kowalski-Trakofler and Vaught, 2003).

“Naturalistic methods do not aim to identify the best possible action, but rather aim to identify a course of action that will produce positive results. And in clear contrast to analytical approaches – which aim to decrease individual subjectivity – the decision maker identifies this course of action from their previous experience”

Despite these advantages, research from the 1980s onwards has suggested that many individuals with significant experience in emergency management do not use analytical approaches when making decisions but rely, instead, on approaches which can broadly be termed ‘naturalistic’ (Flin et al., 1996; Lipschitz et al., 2001; Klein, 2009). Naturalistic methods do not aim to identify the best possible action, but rather aim to identify a course of action that will produce positive results. And in clear contrast to analytical approaches – which aim to decrease individual subjectivity – the decision maker identifies this course of action from their previous experience (Patel et al., 2002). The decision maker matches the situation in which the decision is to be made with previous, similar situations, and then identifies a course of action that has been successful in the past (Lipschitz et al., 2001; Leigh, 2016). This matching can involve a conscious process, or can be subliminal. Depending on the exact approach, the decision maker may test the course of action by forecasting – considering how it is likely to work out in the current situation – and test again during implementation by considering whether the action is working as expected. Rather than considering a range of options concurrently, then, NDM takes one course of action and tests it iteratively. It is important to emphasise that naturalistic decision-making is not the same as whim or gut reaction. NDM makes use of intuition, shaped by previous relevant experience and informed judgement.

While the approach was originally borne out of observation of what decision makers were actually doing (and so was essentially descriptive, rather than normative), many authorities have come to recommend NDM for emergency situations (Tipper, 2016; Klein, 2009). They stress that in emergencies, analytical approaches are unlikely to be effective because there is little time to collect and analyse information; and because there are so many different factors interacting, it is impossible to effectively model the future.

The procedural approach differs from both analytical and naturalistic approaches in that the focus is on the organisation as much as it is on the individual or group making the decision. In this approach, the organisation codifies an approach or series of steps to be taken to conduct a specific task (such as an assessment, or a procurement); the steps are generally based on experience of what has worked in previous situations (in this, it bears similarities to NDM). Decision makers then follow these steps. While the procedure will generally not make the final decision – how much food is required for whom or where to procure it – it greatly reduces the decision-making load by obviating the need to make decisions about how to conduct an activity, when and in what order. The procedural approach is not always a replacement for other decision-making mechanisms, as an analytical process of option generation, information collection and analysis can, hypothetically, form part of a larger procedure.

At the other end of the scale, reference to existing procedures can provide decision makers with the single course of action that is then ‘matched’ and tested in a naturalistic process (see Flin et al., 1996). However, previous work on leadership in humanitarian contexts (Knox Clarke, 2014) and the literature review suggested that the use of procedures – either alone, or in combination with other approaches – might improve the quality of humanitarian decisions. As a result, the diary study was designed to allow consideration of the degree to which organisational procedures has been used as an approach for making decisions.

In the study, participants were not asked to select a decision-making approach category. Rather, individual decisions were later classified by the researchers on the basis of their responses to several multiple choice questions. Where the decision maker indicated that they had made the decision a) by considering a range of options and, b) by making the decision on the basis of analysis, the decision was categorised as analytic. Those where the decision maker indicated that they had a) ‘taken the first good option’ (as opposed to considering a range of options) and b) based the decision on intuition/knowing what to do (as opposed to analysis) were classified as naturalistic.¹¹

“Procedures were used as written in only 17% of all decisions, and were used, but adapted, in a further 34% of decisions, suggesting that procedures are, indeed, often used as a step in decision-making, rather than as a ‘straightjacket’”

The first finding of note was that the experience of humanitarian decision makers did not fall neatly into the categories outlined in the literature review. The majority of decisions (51.3%) fulfilled the two key conditions to be considered as analytic. Around a fifth of the decisions (20.1%) fulfilled the two opposing conditions to be considered naturalistic. But 28.6% were ‘hybrid’, in that they did not fulfil the conditions to be

considered either naturalistic or analytic. 19.3% of all decisions were recorded as having been made on the basis of analysis, rather than intuition or experience, but taking the first good option (which may possibly suggest a more naturalistic approach with a higher level of conscious testing and forecasting), and 9.6% were recorded as having been made on the basis of intuition and/or experience, but considering a range of options. This suggests that the actual processes of decision-making may be more varied than the models identified in the literature review (although it is worth bearing in mind that analytical approaches are suggested as being ‘good practice’ – what people should do – rather than being descriptive of what people actually do). Furthermore, as outlined in [Section 6.2](#), even those decisions that fulfilled the criteria to be either analytical or naturalistic were often not conducted as theory suggests they should be.

Participants were also asked to indicate, for each decision, the degree to which they had followed procedures, choosing between four options. In the diary study, procedures were used as written in only 17% of all decisions, and were used, but adapted, in a further 34% of decisions, suggesting that procedures are, indeed, often used as a step in decision-making, rather than as a ‘straightjacket’. Procedures existed but were ignored in 5% of decisions. In the remaining 44% of decisions, no procedures existed to guide action.

Box 2: Different approaches for different decisions?

Statistics were used to understand relationships between decision-making approaches, the situations in which these approaches were most used and useful, relationship to perceived quality, and so on. For some factors, statistical tests were not able to identify a relationship. For example, no relationship was found between the type of decision being made and the process used, or the quality of the decision. This is likely due to the large number of categories involved in these factors.

Similarly, no statistically significant relationship was found between the type of decision and the decision-making approach used – though, as shown in Figure 5, there were variations in the data.

When it came to making decisions by procedure, decisions related to targeting and to choice of response options were most likely to be proceduralised (in 70% of the former and 65% of the latter, procedures relevant to the situation existed). Procedures were most likely to be followed as written when they related to targeting: around 30% of targeting decisions followed the written procedures (very probably related to the organisation’s assessment mechanisms).

Figure 5: Which decision-making approaches were used to make different kinds of decisions

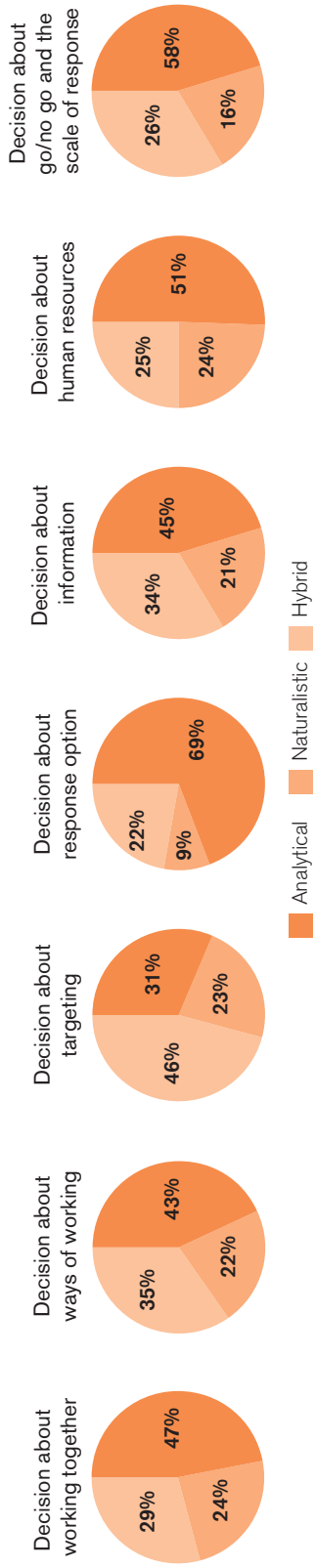
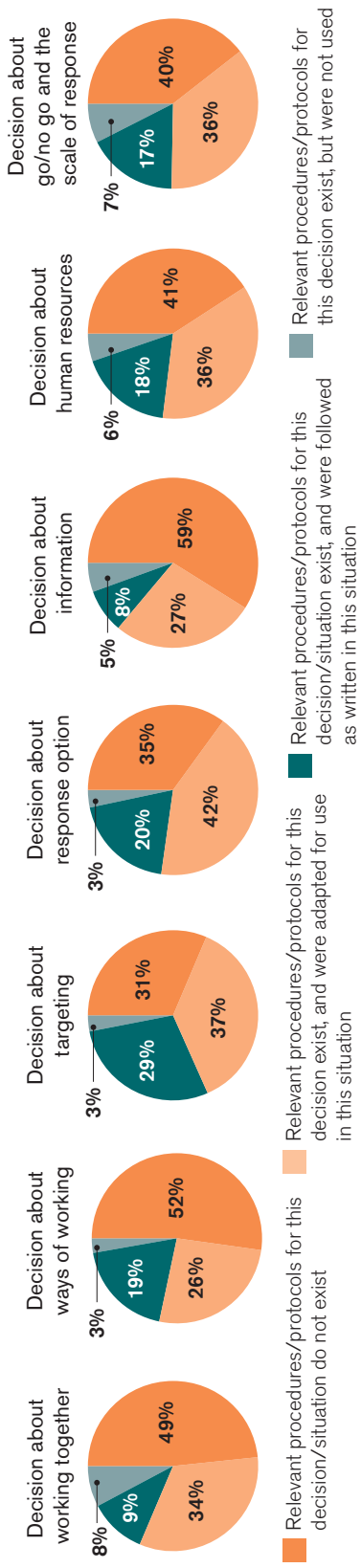


Figure 6: Degree to which procedures were used for each decision category



5.4 Considering criteria

Regardless of the specific process, in all decisions there are a range of factors that get taken into account. In a review of humanitarian evaluations and literature, those most commonly noted were about threats (to staff, affected people and the response in general) about organisational capacity and available resources, about the strategic goals of the organisation or broader response, and participation and accountability. Maxwell et al. (2013) also noted that further issues were likely to come up including feasibility (capacity, access and seasonality), organisational considerations (mandate and skillset) and appropriateness (value for money and preferences of affected people). It is important to note that in many decisions, these criteria were not clearly defined or systematically used (see [Section 6.2.1](#)).

In the study, the most commonly discussed considerations can be grouped into four areas: security, donor relations, making best use of scarce resources, and feasibility. These are discussed below.

Security – When making decisions, for many people ‘security comes first’. Security was mostly described in terms of risk to staff, but risks to affected people were also considered, as was staff wellbeing. While very important for many decision makers, some felt that the focus on security was sometimes more a ‘jump through all the hoops’ (that is, a requirement to follow organisational procedures) rather than due to a likelihood of security incidents occurring. Other risks, such as risk to organisational survival, or risk of negative reaction from partners/coordination bodies, were also discussed though far less frequently than security.

Donor relations – Interviewees often described the importance of considering the potential donor reaction when making decisions. Sometimes, most relevant need highlighted by affected people ‘would not be acceptable for the donors’ who believe another response option would be better. In other circumstances, decision makers had to weigh up the humanitarian principles against donor relationships, for instance where a donor wanted to fund an intervention in an area ‘that’s not where the biggest needs are’. Some have described the balance between humanitarian priorities, donor priorities and bureaucracy as a ‘three-way tug-of-war’ (Eldebo and Zamore, 2018:3). Ethics and principles in decision-making are discussed further in [Box 3](#).

Making best use of scarce resources – Participants were sometimes faced with the need to balance available resources with making the biggest impact. They considered cost effectiveness and efficiency of both human and financial resource, trying to find ‘the best’ for affected people, ‘taking into account the time consumed’ or ‘the budget that is available’.

Feasibility – In a fairly large number of decisions, decision makers focussed less on identifying the best decision than on the most practical or feasible decision: ‘what can we do’ appeared to be a more important consideration than ‘what should we do’. Feasibility included the capacity and nature of their organisation (including mandate, policies and procedures – see [Box 1](#)), access and logistics as well as time. Participants described the

need to make decisions that were ‘actually realistic’ and ‘not only what is possible but what is viable’.

The attention given to participation and accountability in the humanitarian sector in recent times was not reflected as much in the interviews. When discussing affected people, decision makers noted the importance of getting the best response and meeting needs, and the impact of decisions on the ability to meet needs, but few discussed the importance of capturing the perspectives of affected people. This is not to say that no consideration was given here (participants weren’t asked directly about it), but that unlike the other issues above, it did not come up.

Box 3: The role of ethics/principles in making the decision

The humanitarian principles, and more broadly ethics, are an important part of how humanitarians work.¹² In order to find out more about how they influence decision-making, participants were asked specifically about the role of ethics and principles in decision-making. As well as the humanitarian principles, participants also referenced do no harm, taking a principled stance against corruption, and their own personal systems of values (often related to religious beliefs or cultural upbringing).

When asked specifically about the humanitarian principles, there was confusion amongst a surprisingly large number of people between the principles and humanitarian standards, such as The Core Humanitarian Standard on Quality and Accountability (CHS) or Sphere. This conflation was observed from both those without much humanitarian experience and those with substantial experience.

Where they did describe the role of principles and ethics in decision-making, some felt the principles played a ‘very explicit’ role in decision-making while others felt this role was more subconscious. One explained, ‘You wouldn’t find us talking about “because of neutrality, because we need to be impartial” but ... I would say [we are] subconsciously making decisions [along those] lines’. Some felt that principles and ethics were so well mainstreamed throughout all actions, that they took little active notice of them, but felt they were ‘always there’.

These distinctions between an explicit and subconscious role for principles was sometimes described in terms of decision-making approaches, whereby more explicit ‘on the surface’ consideration was given in analytical decision-making, with more ‘implicit’ consideration when decisions were intuitive.

Whether explicit or implicit, decision makers explained that principles and ethics could both help and hinder decision-making.

On the one hand, principles helped to:

- Give focus/narrow down options
- Provide certainty/confidence
- Act as justification, giving credibility/helping with difficult conversations
- Provide a reference frame/compass that reinforced doing the right thing.

However, principles also sometimes were 'hard work':

- They could be difficult to apply, especially where they were balanced against other competing priorities
- The principles conflicted themselves sometimes
- Not everyone (particularly non-humanitarian actors) knows or respects the principles (or interprets them the same way), so they must be explained.

In some cases, these difficulties eventually led to humanitarians choosing to go against humanitarian principles. A recent study of frontline health workers in Syria found that sometimes decision makers are faced with situations where there is no 'right' answer, and in these situations, individuals do often have to 'forgo compliance with core ethical commitments, choose to comply with one ethical obligation at the expense of another, or take an action where no obviously right action exists' (JHBSPH et al., 2019:3).

Yet overall, participants felt that 'principles and ethics, though it's a difficult challenge to take a decision ... gives us a good result'.

5.5 Communicating the decision

As explored further in [Section 7.1](#), other people (through consultation or group decision-making) play an important role for decision makers. This is understandable, given the inter-agency/intra-agency nature of the decisions that humanitarians need to make – with most involving various elements outside of the control of the decision maker.

While recognising the social nature of much humanitarian decision-making (Comes, 2016) and the role of the decision maker within an organisational culture (Heyse, 2006; Lu, 2017), the act of communicating and building support for the decision was not at all prominent in the literature review. However, this step was of clear importance to the participants in this study. Decision makers described the importance of getting support from colleagues for the decision, particularly those more senior to them, as well as those whom the decision may impact – a process which can take some time. Interviewees also described the importance of effectively communicating decisions, rather than 'dropping it on them', so that colleagues 'don't get surprised'.

The communication stage described by participant decision makers was a mixture of information sharing, gaining buy-in (especially where changes might impact others), negotiation and justification. Importantly, it did not solely occur after the decision was made, but throughout the whole decision process: much of the consultation that participants discussed was more concerned with communicating and gaining support than with getting better information.

“There was a perception that, without effective communication, decisions may be seen as an imposition, and risk rejection/not being followed through due to lack of ownership”

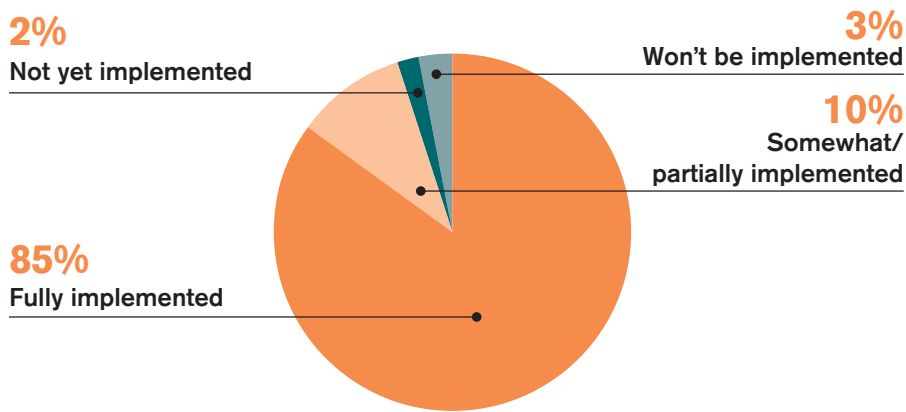
This aspect of communicating the decision was particularly noted in reference to those decisions made by one individual, and/or those which were made with an intuitive/naturalistic approach, where there was a perception that, without effective communication, decisions may be seen as an imposition, and risk rejection/not being followed through due to lack of ownership. There was sometimes a lack of clarity around what was defined as communication (after a decision had been made) or consultation (as part of the deliberation), with one interviewee suggesting that effective communication could help colleagues ‘feel like they’ve been heard’ even if they hadn’t been part of making the decision.

5.6 Implementing the decision

Of all the decisions submitted by participants into their diaries for this study, 85% were ultimately implemented. A further 10% were somewhat or partially implemented,¹³ and 5% were not implemented. For those decisions which were not implemented, some participants provided an explanation. In about 41% of these cases,¹⁴ at the time the participants submitted the questionnaire, the intention was for the decision to go ahead, but there had been a delay. Most often this was due to lack of funding to proceed or having to wait for another party (external to the organisation) to act. For a couple of decisions, other priorities took precedence.

For the remaining 59% (3% of all decisions), the decision was no longer expected to go ahead. The most common reason given was that the situation had changed, or new information had become available which meant the original decision was no longer appropriate, or that on further reflection/discussion there had been a changing of minds. In other examples, the chosen decision option had been tried but had proved unsuccessful, the decision couldn’t be implemented due to the actions of another party, or the decision had been overruled by a donor or someone senior to the decision-maker.

Figure 7: Rate of decision implementation¹⁵



5.7 Reflecting on the decision/building experience

In the literature review, the importance of reflection as part of a broader decision-making process was noted, particularly by those describing NDM – decision makers store information about what has or hasn't worked to 'contribute to future understanding' (Campbell and Knox Clarke, 2018:37). In naturalistic decision-making, part of the process includes 'obtaining feedback to understand how well this course of action is working, relevant for future decision-making' (ibid: 42). It is through this process, that decision makers develop their heuristics,¹⁶ which work best 'where the decision maker has built up a depth of expertise they can use to create useful models of situations and of relevant responses' (ibid:54).

The decisions submitted in the diary and discussed with participants in interview suggest that decision-making is often more of a process than discrete moments, with one decision sometimes leading to many others. This finding aligns well with NDM theory, where 'decisions are seen as part of a flow or sequence: one decision follows and is conditioned by those that come before it' (Campbell and Knox Clarke, 2018:45; Choo, 2002).

Part of this process, then, should involve reflection, in order for the decision maker to take the experience they've gained into future decision-making. In some instances, participants gave examples of how reflection was an important part of their decision with one explaining, 'I would want to see some of the lessons I would derive from that decision ... to do a reflection that I can improve next time I'm faced with a similar or near similar decision to make'.

In another example, a decision maker: 'Received some information and we made a decision ... It was not the right one, and then we had to reconsider later and corrected the situation ... taking this as a lesson learned [since then] we carefully analyse all information that we receive'. When used, reflection on past experiences helps to build up a repertoire that decision makers can use to 'think through different multiple options and

quickly come up with the most possible and viable'. However, reflection as a conscious and deliberate part of the decision-making process was only brought up by a small number of participants, so further work is required to better understand the potential impact of reflection in the humanitarian decision-making process.



Diaries from participants and interviews for this research suggest that decision-making is often more of a process than discrete moments, with one decision leading to many others when responding to crises and disasters like Hurricane Maria, which struck many Caribbean islands such as Dominica. Photo credit: UN Photo/Rick Bajornas.



In brief:

- However decisions are actually made, they generally go through a process from recognition that a decision is required to implementation.
- Consciously recognising the need to make a decision is often an overlooked step in the process.
- Most decisions recorded in the study were reactive – the recognition occurred because an event had already taken place, or because the decision maker was asked/told to make a decision.
- Only 8% of decisions were proactive, where decision makers recognised or anticipated an emerging situation and took a decision before it caused difficulty.
- Participants generally found information collection useful and felt that this was an important part of the process. However, the study did not demonstrate any statistical relationship between collecting information and the quality of the decision. Information didn't appear to make decisions better (or worse).
- Three categories of approaches for making decisions were identified: analytical methods which aim to identify the best course of action from a range of options, naturalistic methods which use prior experience to choose a good course of action given the circumstances, and procedural where decisions are guided by use of organisation procedures and protocols.
- Communicating decisions with others – both before and after they have been made - is an important step in the decision process. Participants said it helped achieve support for the decision (and so better implementation) and also spread responsibility.
- Reflection after implementation is also an important (but often overlooked) step, especially as it can build up a decision maker's repertoire of possible options and knowledge of what may or may not work in the future.

Endnotes for this chapter

1. This was an open text question which researchers then categorised based on text responses. 24 decisions could not be categorised due to insufficient information or the participant not really answering the question. The percentage figures here are therefore calculated out of a total 1,011 decisions.
2. A multinomial regression, with familiarity as predictor and whether the decision was proactive/reactive/assigned as outcome, adjusting for multiple decisions per decision maker, yielded a likelihood ratio p-value of 0.01. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
3. A multinomial regression, with whether the decision maker understood the decision problem/situation as predictor and whether the decision was proactive/reactive/assigned as outcome, adjusting for multiple decisions per decision maker, yielded a likelihood ratio p-value of less than 0.0001. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
4. A multinomial regression, with who made the decision as predictor and whether the decision was proactive/reactive/assigned as outcome, adjusting for multiple decisions per decision maker, yielded a likelihood ratio p-value of 0.0036. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
5. A multinomial regression, with level of experience as predictor and whether the decision was proactive/reactive/assigned as outcome, adjusting for multiple decisions per decision maker, yielded a likelihood ratio p-value of 0.01. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
6. This was tested using a regression model with quality score as outcome and level of information collected as predictor, adjusting for multiple decisions per decision maker, which yielded a likelihood ratio test p-value of 0.69.
7. Situation awareness can be defined as “the ability to describe the situation, understand the situation and accurately predict the future situation” (Lauder and Perry, 2014:146). For more resources to improve situation awareness in the humanitarian field see Reid and Verity, 2019.
8. Due to the varied nature of open text responses, it was not possible to categorise the types of information sought. The authors conducted a review of text responses to identify patterns, separated by decision-making approach.
9. This relationship is confirmed with multinomial logistic regression with the amount of information sought as outcome and uncertainty level as a predictor, adjusting for multiple decisions per decision maker, yielding a likelihood ratio test p-value of 0.0259.

10. This was observed with descriptive statistics - as uncertainty increased, the number of decisions with no information decreased and the number of decisions with a lot of information sought increased.
11. In an effort to understand more about procedural definitions, towards the end of the analysis process the researchers experimented with a revised classification of the decision-making categories, removing those decisions which had used procedures as written from their initial categorisation as analytical/naturalistic/hybrid and creating a new 'procedural' category. Ultimately, these results were not used in the study (the original classifications has been sense-checked in interview and the revised classifications involved mixing data from different categories). However, it is important to note that tests run using these experimental recategorisations did produce different findings in some (though not all) statistical tests.
12. For a comprehensive look at the ethical challenges faced by humanitarian decision makers, see JHBSPH et al, 2019.
13. These figures are out of a total 993 decisions for which this question was answered. Participants were specifically asked to indicate to what degree the following statement was correct: 'this decision was implemented/ followed through'. 848 said generally/strongly agree, 101 said somewhat agree/somewhat disagree and 44 said generally/strongly disagree.
14. 34 participants provided an explanation as to why the decision was not implemented. These percentages are based on this figure.
15. This graph is for illustrative purposes only. As noted in earlier footnotes, the figures for those decisions which were/were not implemented are percentages out of a total 993 decisions, whereas the figures for whether decisions were not implemented at all or not yet implemented are percentages out of a total 34 decisions (rather than 44 which were not implemented, as 10 decision makers did not provide an explanation as to why the decision was not implemented).
16. Heuristics are developed as decision makers gain experience, which can act as mental shortcuts or rules of thumb when making decisions (Campbell and Knox Clarke, 2018; Leigh 2016; Gigerenzer, 2014; Gonçalves, 2009).



Key findings

6 Key findings

The key findings of the study relate to a) the influence that various circumstances (such as urgency and uncertainty) have on operational decision-making and b) the use of different approaches (analytical, naturalistic and procedural) for making decisions.

The study considers a number of different potential relationships – critically, it considers any relationships to the perceived quality of the decision (see [Box 4](#)). It also considers whether certain decision-making approaches were more used, or more useful, in various circumstances, or by varying decision makers. The key findings are presented in the section below.

Box 4: The difficulty of assessing the quality of decisions

As part of this research, contributors were asked to rate each decision for quality (see [annex](#)). This allowed an analysis of whether there was a statistical relationship between certain conditions and the perceived quality of decisions. There are a number of significant relationships between perceived quality and various factors – such as uncertainty - which are consistent across the dataset and which statistical tests suggest are very unlikely to be a result of chance. However, most of the decisions submitted to the study were assessed as being high quality (5 or 6 on a six-point scale) by the decision makers, and so while we can say that a certain factor relates to better quality decisions, they are not very much better – the average difference is generally well under 0.5 on a six-point scale. As a result, the results around perceived quality should be treated with some caution.

Nevertheless, when considered in combination with the results of interviews and of other research, these statistical tests can help us to further understand how the nature of the decision affects the decision process and final quality of the decision.

6.1 What are the effects of significance, urgency, uncertainty and stress on decision-making?

In [Section 4](#), the diverse circumstances within which decision makers are working were explored. If one accepts the general conclusion of most scholars that different types of decision require different approaches to decision-making, then humanitarian leaders need to be skilled in a variety of decision-making approaches. But before considering these various approaches, it is worth looking into how the various factors outlined above affect the behaviour of decision makers. This section outlines a number of interesting relationships identified in the study, which relate to the circumstances in which decisions were made.

With respect to significance, there did not seem to be a strong relationship to quality: the quality of decisions neither improved nor decreased on the basis of whether the decision would have significant consequences.¹ Some contributors (a fairly small number) suggested that significant decisions took more time, were more likely to use structured decision-making approaches and to be recorded, and were more likely to be taken in groups. Analysis of the quantitative results confirmed that structured, analytical approaches were more generally used when a decision would have significant consequences:² 83% of all the analytical decisions taken were in situations where the decisions was rated as being significant (4-6 for significance on a six-point scale), while only 65% of ‘naturalistic’ decisions, guided by intuition/experience, were made under the same circumstances. However, the results did not confirm that these decisions took more time: there was no statistically significant relationship between the amount of time taken and the degree to which decisions were perceived to have significant consequences.³

“Perhaps surprisingly, the more urgent the decision became, the better the (perceived) quality of the decision was”

When it came to urgent decisions, on the other hand, there did seem to be a relationship to quality. Perhaps surprisingly, the more urgent the decision became, the better the (perceived) quality of the decision was.⁴ In terms of the effect of urgency on the decision-making process, interviewees were split: some said that more urgent decisions were more likely to be made by individuals, and others said that they were more likely to be made by groups. Statistical analysis of the data did not show any consistent trend around urgency and group/individual decisions⁵ – the role of the group is discussed further in [Section 7.1](#). There was more unanimity around other elements of the decision-making process, however. Several interviewees suggested that, when a decision was urgent, they were less likely to collect information and use structured, analytical decision-making approaches: ‘You don’t have the time to say “okay, I’m collecting data for three weeks

and then I'm analysing it for three weeks and then I'm coming up with my recommendations in two months". So ... you need to base your decisions more on intuition'. They also suggested that they were more likely to accept 'good enough' decisions, rather than trying to find the best possible solution. These observations would be in line with much of the published literature (see for example: White and Turoff, 2010; Leigh, 2016; Gralla et al., 2016). But, while this may be the case for some individuals, the statistical analysis did not support the idea that, overall, urgent decisions are made in a less structured, more intuitive way: there was no statistically significant relationship between urgency and decision-making approach.⁶

“In many emergency contexts, the information required to reduce the uncertainty may not be available. Humanitarian crises are complex situations, where many things are interconnected in countless ways. While this is arguably a problem of lack of information, it is not one that can be solved by more information”

There were, however, strong relationships between uncertainty and the way that people made decisions. The more uncertain the situation became (both in terms of current and future uncertainty), the more likely decision makers were to seek additional information,⁷ and the more likely they were to try and identify a series of options, and use a more structured and analytical approach to decision-making (as opposed to a more intuitive approach).⁸ The same is true for unfamiliar decisions – decision makers were more likely to use analytical approaches where decisions were unfamiliar.⁹ [Section 7.3](#) discusses the role of familiarity in decision-making in more detail.

One participant noted, 'In a context where so many things are uncertain, and things can go wrong and change so quickly, it's always good to be able to have access to a range of options based on current information and analysis that can influence your decision-making'. However, it is not clear that this approach is effective – neither increased information collection nor use of analytical approaches seem to relate to improved decision-making (see [Section 6.2.1](#)). At least some of the literature suggests that increased information collection in situations of uncertainty can have a negative effect on decision-making, because the requirement for analysis can be overwhelming (Comes, 2016; Kowalski-Trakofler and Vaught, 2003; Quarantelli, 1988) and lead to 'analysis paralysis' (Aldunate et al., 2005: 29). At the same time, in many emergency contexts, the information required to reduce the uncertainty may not be available. Humanitarian crises are complex situations, where many things are interconnected in countless ways.

While this is arguably a problem of lack of information, it is not one that can be solved by more information. Unlike risk (which can be calculated with probabilities), where there is uncertainty, all of the information we

could possibly gather still would not be enough (Campbell and Knox Clarke, 2018; Scoones, 2019). In emergency situations, this ‘deep uncertainty’ (Kalra et al., 2014: i) will always be present; no amount of information would ever be able to give the ‘answer’ (Lu, 2017: 105; Campbell and Knox Clarke, 2018). Where contributors were unable to obtain the information, they needed to decrease their uncertainty, they tended to resort to a number of alternative actions. Some stopped and waited, hoping that more information would become available: ‘I just could not make the decision with that kind of information. I mean, it wasn’t enough. So, I guess I meant I didn’t know what to do’. This ‘freezing’ has been noted in a number of evaluations (see for example, Adams et al., 2015; Murray et al., 2015). Others attempted to keep options open – deciding to follow a course of action that would allow for changes later, as more information became available. But the majority appear to have consciously decided to assume that the worst possible scenario would occur, and to take their decisions on the basis of this ‘worst case’ assumption: ‘The unclarity, and the lack of information ... made me stick to the safer grounds’. The risk aversion often noted in the sector appears here to be a response to uncertainty and lack of information. Considering the variety shown in these approaches to uncertain situations (and, presumably, the variation in success of different approaches), it is perhaps not surprising that while the median scores for quality suggested that decisions made in situations of less uncertainty were better than those in higher uncertainty, the evidence for a consistent relationship between uncertainty and decision quality was not strong.¹⁰

While some have emphasised the potential positive influence that stress can have on decision-making (Starcke and Brand, 2012), in general, the literature consulted for this study seemed to suggest that stress has negative impacts on decision quality for a variety of reasons, largely related to the ability to process information.

Stressed individuals may not remember important information (Kowalski-Trakofler and Vaught, 2003; Weick, 1993), or may struggle to think creatively (Weick), and will narrow their focus of attention and consider less information when making decisions (Leigh, 2016: 5; Kowalski-Trakofler and Vaught, 2003; White and Turoff, 2010; Starcke and Brand, 2012). It was surprising, then, to see that the statistical tests showed that there was a significant relationship between stress and the perceived quality of the decision.¹¹ Decisions which were high stress (5-6/6) or low stress (1-2/6) are more associated with better quality decisions than decisions with medium-stress decisions (3-4/6).

When asked why they thought high stress decisions might be associated with good decisions, contributors broadly agreed with the literature – they felt that increased stress led to increased focus on the decision, both by individuals and by teams. But they tended to see this increased focus as a good thing – by narrowing their focus to the decision, and ignoring other issues, they were more likely to obtain a better decision.

**In brief:**

- The more urgent a decision became, the better the perceived quality of the decision.
- Decisions made in situations of less uncertainty were perceived as being better quality than those in higher uncertainty, but this relationship was not strong.
- However, the more uncertain a decision became, the more likely a decision maker would be to seek additional information and try to use a structured analytical approach. This didn't appear to improve the quality of the decision.
- Unlike risk, which can be calculated with probabilities, uncertainty can mean that no amount of information will ever give the answer – and can in fact cause delays as decision makers wait for information that will never come.
- Decisions rated as either high or low stress were more associated with better quality decisions than those with medium levels of stress.

6.2 Analysis, intuition or procedures – what works, and when?

The following section outlines key findings around each of the main decision-making approaches. These have also been presented in Table 3.

Table 3: Summary of key findings around decision-making approaches

	Naturalistic decision-making	Analytical decision-making	Procedural decisions
Perception of the quality of the decision	Received marginally higher scores for decision quality, even in low urgency and high consequence situations	Decisions made by analysis score slightly lower for decision quality	Use of protocols/ decisions does not influence the quality of the decision
Decision length	Generally quicker	Takes longer	
Use of information	NDM decisions sought out less information than analytical decisions	Analytical decisions sought out more information than NDM	
Familiarity	Used more often, and resulted in better quality, where situations were familiar	The more unfamiliar, the more likely analysis was used. However, the best analytical decisions were made in very familiar situations	The less familiar a situation, the less likely protocols/ procedures were to exist
Uncertainty	NDM was used more frequently, and led to higher quality decisions, where the situation was more certain	Analytical decisions were often used in situations of uncertainty. However, they were of the highest quality when both the current and future uncertainty was low.	There is little pattern between current/ future uncertainty and the use of procedures
Urgency	NDM decisions were of the highest quality when decisions were very urgent	Decision makers were no less likely to use analytical approaches in urgent situations, but analytical decisions were of the highest quality when they were made in less urgent situations	The more urgent the situation, the less likely protocols/ procedures were to exist

6.2.1 Analytical decision-making process

In interviews, the majority of contributors were clear that they preferred decision-making styles that relied on the use of data to choose between a range of options. Fairly typical comments included: ‘I would try to do this in the analytical way. Because from my perspective, it’s always the best way to do it, to gather the facts, to look at the fact, and then to make the decision’ and ‘If you take decisions ... without analysing, you don’t have enough information to provide a better response’. Humanitarian decision makers appear to share the widely held ‘assumption that the best decisions are rational – based on logic and factual information’ (Kowalski-Trakofler and Vaught, 2003:8).

“Participants preferred the analytical style, but, in hindsight, perceived the quality of decisions taken in this way to be somewhat lower. Analytical decisions scored lower on quality even in areas where contributors suggested they were particularly useful – in making decisions together with other agencies, and in making the most important decisions”

The preference for analytical approaches was not based solely on the belief that decisions that were made this way were of higher quality. Interviewees also tended to associate these approaches with group or collaborative decision-making (which was also broadly preferred over individual decision-making), and this relationship was borne out by statistical tests.¹²

Interviewees were also clear that analytical approaches provided more accountability and justification for the eventual decision: ‘I need to come up with something that I can explain to my boss and to justify to everybody else’; ‘Saying that my intuition told me to do it, it’s not good enough and it’s not mature enough. So, you know, even if I’m 90% sure what to do, still it’s good to go through some analytical process, to have a basis that you can share with others for your decision, in case things go bad’. This not only protected the decision maker from accusations that they had not done their job, but also served to reduce stress: one interviewee described how using this approach made her ‘feel safe’.

Given these perceived advantages, it is not surprising that ‘analytical decisions’ formed the largest single group of decisions: 51.3% of all the decisions recorded were analytical. What is more surprising is that, when participants answered questions about the perceived quality of these decisions, analytical decisions scored consistently (though just marginally) lower than any other type of decision for quality: participants preferred the analytical style, but, in hindsight, perceived the quality of decisions taken in this way to be somewhat lower.¹³ Analytical decisions scored lower on

quality even in areas where contributors suggested they were particularly useful – in making decisions together with other agencies, and in making the most important decisions.

We cannot conclusively explain this finding, but at least three potential explanations are worth considering:

1. It is possible that some other factor is influencing this relationship.

As highlighted throughout the paper, various other factors have a statistically significant influence on perceived decision quality. There may also be other factors, which were outside the scope of the study, but which have an influence on these results.

To better understand the statistical relationship between decision-making approach and perceived quality, a number of statistical tests¹⁴ were performed using models which considered the potential influence of other factors on the approach. It is clear that the decision-making approach is by no means the only factor which has an influence on the perceived quality of decisions in the study. As the statistical models are not able to indicate which relationship to quality has more influence than another, it's quite possible decision-making approach is not the most significant predictor of quality (and, as previously noted, the average difference between quality scores here was marginal)¹⁵. At the same time, none of the statistical tests performed negate the findings on decision-making approach and quality – the relationship does not appear to be explained away by these other influential variables.

2. Decision makers, preferring analytical approaches, are using them in situations for which they are poorly adapted. The literature review suggested that analytical processes are generally time consuming, and not well suited for making urgent decisions (Patel et al., 2002; Comes, 2016). To the degree that this is the case (and several contributors mentioned this constraint in interviews), one would expect analytical approaches to be used more in low urgency, and less in high urgency situations. However, the results from the diary study suggested that decision makers are no less likely to use analytical approaches in urgent situations: urgency does not seem to affect the way that decisions are made.¹⁶ At the same time, analytical approaches are more common in decisions that take longer to make (see [Figure 8](#)). It is possible that decision quality is lower, in some cases, because analytical approaches are being used for urgent decisions, where they could be expected to perform poorly.

The literature review also suggested that analytical approaches to decision-making were unlikely to work in situations of complexity and uncertainty. As Klein and Klinger (1991:16) point out, 'it is difficult to factor in ambiguity, vagueness and inaccuracies when applying analytical methods'.



Decision makers in the study were more likely to turn to analytical approaches in situations of uncertainty and were also more likely to use analytical approaches where the decision required something new. Photo credit: UN Photo/Mildred Ochoa.

While collecting and analysing information is a useful way of addressing a situation where the information is available, and where the situation can be 'known', in complex emergency environments, there are generally so many variables at play that the future cannot be known, however much information is collected (Khorram-Manesh et al., 2016; Lu, 2017; Kalra et al., 2014: 8). And so, attempts to collect information can lead nowhere, or can result in a useless 'deluge' of irrelevant information (Colombo and Checchi, 2018: 216). But the decision makers in the study were in fact *more* likely to turn to analytical approaches in situations of uncertainty – including situations of high future uncertainty, where an approach based around outlining options, and then collecting evidence to quantify the potential return for each option under forecast conditions, might not be effective.¹⁷ Decision makers were also more likely to use analytical approaches where the decision required something new.¹⁸ Again, this would suggest that the problem is not the decision method per se, but rather its use in situations for which it is not advised.

3. The third potential explanation for the poorer quality of analytical decision processes is how well the approaches are being used.

It is important here to stress again that contributors did not describe the decisions they made as either analytical or intuitive – rather, this categorisation was done at the analysis stage of the research. As such, the contributors to the study were not attempting to follow a single, prescribed 'pure' analytical method, but were rather describing how they made decisions. Nevertheless, in the verbal descriptions of the decision

process given at interview, these decisions tended to have elements that one would expect to find in a classic analytical decision, as well as to lack some elements that, according to the literature, are required to choose successfully between a range of options.

It is at least possible that, had these ‘analytic- like’ decisions included more elements of the ‘textbook’ analytic decision, they would have been seen as being better quality. Two elements stand out. The first relates to the identification of options. A decision between options is, of course, only as good as the options that are available. A number of interviews suggested that the option generation process had been fairly cursory: ‘Many decisions that I submitted, the variety of options was not as many as I would have ... had’. In a number of cases, the decision maker suggested that the exercise had begun with a favourite option, and that other options were only considered to ‘check’ or validate the preferred way of proceeding: ‘I have identified my preferred solution, but I do need to look at other options, just to be sure that I don’t miss anything’. It is possible that a broader and more objective approach to option generation may have produced better alternatives, and so better decisions.

“In many of the processes outlined by contributors to the study, the criteria for judging value were not made clear, or even explicit”

The second area where option based, analytical decisions could perhaps have been conducted more effectively is in clarifying the criteria on which the decision is being made. Analytical approaches rely not only on choosing between options, but on making this choice by determining the decision criteria and then identifying which of the options will create the most value according to these criteria. Explicit criteria make the decision more objective – the idea being that strict quantification of options by the value they will create prevents bias creeping into the decision, and focus the decision makers on what they are attempting to achieve. The study identified a number of factors decision makers take into account when making decisions (see [Section 5.4](#)). However, in many of the processes outlined by contributors to the study, the criteria for judging value were not made clear, or even explicit. As a result, ‘you don’t know based on what the other people make their decisions’. One contributor, reflecting on the study suggested that ‘what I’ve learned is I probably should have emphasised more that everybody understood or had the same understanding of what impact was’. Failure to agree explicit criteria on which to judge options may have meant that these option-based decision processes were less effective than they might have been.

6.2.2 Naturalistic decision-making

In the diary study, 20.1% of decisions were reported as fulfilling the two conditions of being ‘mostly based on intuition/knowing what to do’ and following a process where the decision maker ‘took the first good option’ (rather than considering a variety of options). As these are key elements of NDM approaches, and the elements that most clearly differentiate them from analytical approaches, we categorised these decisions as ‘naturalistic’.

In the literature review, NDM is generally described as being used by decision makers in circumstances where there is little time to make a decision and the situation is a familiar one (and so the decision maker can fall back on relevant previous experience). The applicability of NDM approaches to situations of uncertainty is less clear. While they were developed to address situations of ‘vague goals [and] ... changing conditions’ (Lu, 2017: 20), NDM approaches essentially address both uncertainty about the situation and uncertainty about the future by matching the presenting situation to similar situations the decision maker has encountered in the past, and then making (and, ideally, testing) the assumption that courses of action that were successful in the past will also be successful in the current situation. This can be effective – as long as the decision maker has been in a similar situation previously, and as long as she correctly matches the current situation to past experience. However, NDM can be dangerous where experience is used in new, very different, circumstances (Leigh, 2016; Quarantelli, 1988), because it can lead to inappropriate courses of action. Overall, the suggestion from the literature seems to be that NDM will – and should - be used in situations of high uncertainty only where familiarity is also high, and not in situations which are either new to the decision maker, or ‘crises’¹⁹ such as the West African Ebola epidemic, that are new to the system as a whole.

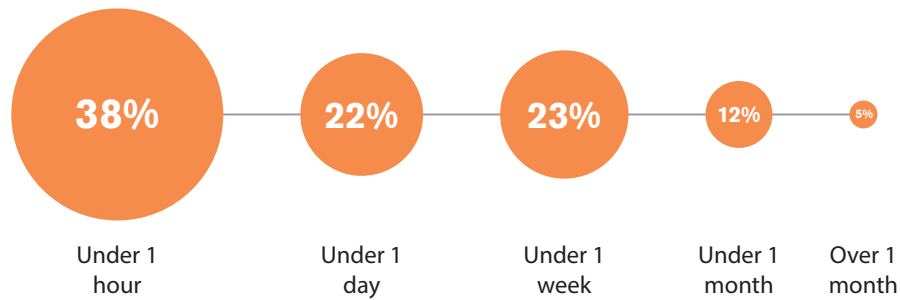
In the diary study, contributors did not tend to use naturalistic approaches more often in urgent situations:²⁰ and were in fact marginally more likely to use them where the situation was quite low urgency (although in interviews some individuals suggested that they would be more likely to use experience-based approaches in these situations). Where naturalistic approaches were used, however, they tended to be associated with shorter decision-making time – 40% of naturalistic decisions were made within one hour.

On the other hand, decision makers did tend to be more likely to use NDM in more familiar situations²¹ and less uncertain situations (both current and future uncertainty);²² use of NDM decreased as situations became less certain and less familiar.

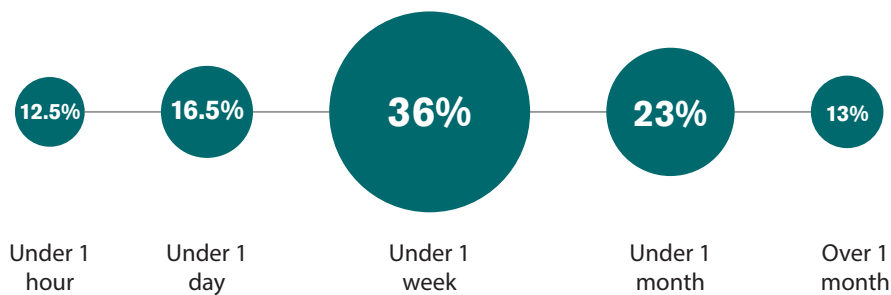
In the literature, and in the interviews, successful use of NDM approaches is strongly associated with the amount of experience that a decision maker has (Gonçalves, 2009; Lipshitz et al., 2001), and experienced decision makers are considered more likely to use NDM. The diary study did not, however, show any relationship between the length of humanitarian experience that decision makers had and the likelihood that they would use these approaches.²³

Figure 8: Length of time each decision took, separated by decision-making type

Naturalistic decision-making



Analytical decision-making



As noted above, contributors to the study tended to express a strong preference for analytical decision types. Many also expressed a corresponding lack of enthusiasm for decisions made on the basis of intuition or experience, which did not use information in any structured way to consider and weigh up options. These decisions were often described as being of poorer quality and less justifiable. Similar critiques have been raised by others in the humanitarian sector who dismiss intuitive decision-making (Blanchet et al., 2018). Several interviewees suggested that NDM decisions were best kept for situations where there were very few realistic choices, or for ‘administrative decisions, or decisions with not very significant consequences, where there is not much value added in searching for the best optimum, and the best possible decision’. This helps to explain the finding that NDM was used less often when consequences were high or medium, and at the same rate as analytical decision-making when consequences were low.²⁴

However, the data did not demonstrate any relationship between choice of decision-making approach and the degree of significance of the decision.²⁵ A few interviewees suggested also that intuition was valuable when making decisions about relationships with individuals and organisations: ‘When there was a high degree of interpersonal issues at stake, and political issues, and agendas’.

Given the frequent lack of enthusiasm for naturalistic approaches expressed in the interviews, it was surprising that naturalistic decisions were statistically likely to be perceived, in hindsight, as having been of better quality than analytical decisions (although the actual difference in average quality score was small).²⁶ This was particularly the case in urgent decisions, as well as where the current situation was uncertain. The quality of NDM decisions showed a statistically significant increase as the familiarity of the decision maker with the situation, or their knowledge of the context, increased.²⁷

Given the frequent lack of enthusiasm for naturalistic approaches expressed in the interviews, it was surprising that naturalistic decisions were statistically likely to be perceived, in hindsight, as having been of better quality than analytical decisions (although the actual difference in average quality score was small).

It is important to note, however, that the process taken in these NDM decisions often differed in important ways from the processes described in much of the literature. Few of the decisions appear to have been immediate or instinctive decisions: ‘The minute that I thought of it ... I knew what decisions I wanted to make’. Some contributors were clear that they thought of their experience as providing information: ‘When I mean using intuition, it’s that you use ... not straightforward facts, but combination of a lot of information that you have about the context in which you work’. Perhaps more surprisingly, in over half of the naturalistic decisions, the knowledge gained from experience was augmented by additional information that the decision maker sought out prior to making the decision. A small number of interviewees suggested that they used this information to clarify whether the situation ‘matched’ previous situations: ‘Even if it is an intuitive decision, I think you need to see all the things that happen, and then say, “Okay, it’s similar to the situation in the past” so I take the intuitive decision’. Others explained that they used information to ‘test’ the decision by forecasting: ‘maybe this is where the information-seeking part comes ... check[ing] with colleagues about the potential repercussions or consequences’.

This quote also highlights the second, slightly surprising, element of the NDM type decisions described in the diaries: they often had a strong group element. The literature reviewed for this research suggested that naturalistic decisions were generally ‘highly individual and intuitive’ (Campbell and Knox Clarke, 2018: 56) and not well suited to making decisions in groups, or for considering the positions and requirements of multiple stakeholders (Klein, 2009). However, 14% of all the NDM decisions were made in groups, and, in addition, 39% of decisions were made in consultation: ‘I reach people very quickly and say ... “this is something I’m going to do, is there anything you can advise that I do differently

or am aware of?"; 'When I use my own intuition, and compare it with the experience of others, it strengthens what I have'. The interviews also strongly suggest that group decision-making or decisions involving consultation make the decision more justifiable by spreading responsibility and by giving stakeholders a chance to object.

“It would seem, then, that there may be good reason to support the use of naturalistic approaches to decision-making by experienced humanitarians, particularly in situations that are both urgent and familiar. Given the danger inherent in the approach of using experience in situations where it does not actually apply, there would appear to be benefits in ensuring that when the approach is used, the decision maker actively tests any assumption of similarity between past and present conditions”

It would seem, then, that there may be good reason to support the use of naturalistic approaches to decision-making by experienced humanitarians, particularly in situations that are both urgent and familiar. Given the danger inherent in the approach of using experience in situations where it does not actually apply, there would appear to be benefits in ensuring that when the approach is used, the decision maker actively tests any assumption of similarity between past and present conditions. This is a standard element of several NDM approaches, including the recognition primed decision-making (RPD) approach (Klein, 2009; Smith and Dowell, 2000) and the recognition/metacognition (RM) model (Cohen et al., 1996 in Lipshitz et al., 2001). For the same reason, there is value in testing the validity of the proposed action by ‘forecasting’, or thinking forward, to imagine possible outcomes of the action.

Clarity of the roles and decision-making authority of senior staff in humanitarian country offices also appears to strengthen the use of naturalistic approaches. In a number of interviews, contributors explained that this clarity (and a supportive organisational culture) empowered them to take the best decision they could and feel justified in doing so, even if they did so on the basis of experience, rather than analysis. Where roles were unclear, it was more likely that decisions would not be taken or would be ‘pushed upwards’. The importance of role clarity to humanitarian country leadership has been demonstrated in previous ALNAP research (Knox Clarke, 2014).

6.2.3 Procedural decision-making

A third approach to making decisions that was considered in the study relates to the use of procedures and processes: formalised sequences of actions established by the organisation, to be used in specific circumstances. Procedures can, to an extent, be seen as a substitute for making numerous and ad hoc decisions (Gawande, 2013). A number of authors suggest that this approach, however, has not performed well in emergency response (Lee and Preston, 2012; Metcalfe et al., 2011; Mendonca et al., 2001), largely because it is best suited to stable, repetitive and well-structured tasks (Patel et al., 2002) and less suited to dynamic/changing humanitarian crises (Reid and Verity, 2019). Others suggest that procedures can be useful, to the degree that they serve as a basis for improvisation, rather than a strict straightjacket (Leigh, 2016; Quarantelli, 1988).

In the diary study, procedures were used as written in only 16.7% of all decisions, and were used, but adapted, in a further 34% of decisions, suggesting that they are, indeed, often used as a step in decision-making, rather than as a 'straightjacket'. Procedures existed but were ignored in 5% of decisions, and in the remaining 44% of decisions, no procedures existed to guide action. As noted earlier, decisions about targeting and choice of response options were most likely to be proceduralised.

The use of procedures does not preclude other forms of decision-making, but rather overlaps with them. An analytical decision approach may follow a particular organisational procedure, while the preferred action identified in a more naturalistic approach may be identified through the consideration and adaption of procedures. Overall, relevant procedures were available and used in 59% of decisions that were made using an analytic process, and 49% of decisions made using a naturalistic process.

Some interviewees suggested that the existence of procedures was 'always useful' and made decisions 'easier', even when they were not followed exactly. This was not necessarily because they improved the quality of the decision per se, but rather they provided legitimacy for decisions, simplified complex situations and ensured consistency in organisational activities over time and from one place to another. These observations align closely with those of previous ALNAP work on the topic (Knox Clarke, 2014). However, interviewees also underlined that there were many situations which were not possible to proceduralise, and that, even where procedures existed, they could be too time consuming to use.

The results of the study find that procedures are less likely to exist and be used in situations which are less familiar to the decision maker²⁸ (suggesting these situations are also less familiar to the organisation). With respect to quality, there was no statistical relationship between those decisions where protocols and procedures were used and those where they were not.²⁹



In brief:

- Decision makers prefer to use analytical decision-making processes, and appear to be using them even in circumstances where they are poorly suited (those with high urgency and uncertainty).
- This may have contributed to the finding that analytical decisions were perceived as being lower quality than intuitive/naturalistic ones.
- Many of the analytical decisions submitted don't appear to be following a good 'analytic' process. Decision makers don't spend enough time on option generation and in clearly defining the criteria they will use to compare options – this could also contribute to the lower quality scores.
- Decision-making approach is not the only factor which influences the quality of the decision, and is not necessarily the most significant predictor of quality.
- Naturalistic decision-making works best in urgent, familiar situations. However, decision makers were less likely to use these methods in these situations, suggesting decision makers don't know the best method to use to make decisions in different circumstances.
- It is important that decision makers using NDM test their assumptions to ensure that the experience they are relying on is applicable to the situation, and have role clarity so they and others know which decisions fall within their responsibility.
- Half of the decisions submitted used procedures as written or adapted to the situation, most commonly for decisions about targeting and choice of response option.
- No relationship between use of procedures and quality was identified.

Endnotes for this chapter

- 1 A regression model with quality score as outcome and level of consequences as predictor, adjusting for multiple decisions per decision maker, yielded a likelihood ratio test p-value of 0.09.
- 2 This is supported by a multinomial regression model with decision-making type as outcome and level of significance as predictor, adjusting for multiple decisions per decision maker, which yielded a likelihood ratio test p-value of less than 0.001.
- 3 An ordinal regression model with amount of time taken to make the decision as outcome and level of consequences as predictor, accounting for multiple decisions per decision maker, yielded a likelihood ratio test p-value of around 0.1.
- 4 A regression model with quality score as outcome and urgency as predictor, adjusting for multiple decisions per decision maker, yielded a likelihood ratio test p-value of 0.01, indicating that urgency seems to impact quality significantly.
- 5 This is observed through descriptive statistics and the use of mosaic plots.
- 6 The observation that urgency does not seem to impact decision-making type is supported by a multinomial regression model, with decision-making type as outcome and urgency as a predictor, adjusting for multiple decisions per decision maker (likelihood ratio test, p-value=0.18).
- 7 This relationship between uncertainty and amount of information sought is demonstrated by a multinomial logistic regression with amount of information sought as outcome and current uncertainty level as a predictor, adjusting for multiple decisions per decision maker, (likelihood ratio test, p-value=0.0259). A similar model, considering future uncertainty, also indicates that level of future uncertainty impacts the amount of information sought (likelihood ratio test p-value of 0.03).
- 8 A multinomial regression model, with decision-making type as outcome and uncertainty of current situation as a predictor, adjusting for multiple decisions per decision maker, gave a likelihood ratio test p-value <0.001. The same multinomial regression analysis yields a likelihood ratio test p-value of less than 0.001 again, when uncertainty in the evolution of a situation is the predictor.
- 9 This is supported by descriptive statistics, using a mosaic plot.
- 10 A regression model with quality as outcome and level of uncertainty in the situation as a predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of 0.08, while the same for uncertainty in the evolution of a situation has a p-value of 0.07.
- 11 The relationship between quality and stress was tested using a regression model with quality as outcome and level of stress as predictor, adjusting for multiple decisions per decision maker, yielding a likelihood ratio test p-value of 0.015 across all cases.

- 12 This is confirmed by a multinomial regression model, with decision-making type as outcome and decision-making process as a predictor, adjusting for multiple decisions per decision maker (likelihood ratio test, p-value <0.0001).
- 13 Decisions made using NDM scored higher in terms of quality, on average, than those using hybrid approaches, which in turn scored higher on average than analytical decisions. The existence of a relationship here is supported by a regression model with quality score as the outcome and decision type as a predictor, adjusting for multiple decisions per decision maker, which yielded a likelihood ratio test p-value of 0.028. Further investigation using descriptive statistics revealed the nature of the relationship. It is important to note the difference between quality scores, however, was small.
- 14 The first test looked at whether relationship between approach and perceived quality persisted in different circumstances. In many, it did – decisions made using NDM were perceived as better quality where decisions were very urgent, where there a lot uncertainty about how the situation would evolve in the future, at all levels of uncertainty about the current situation, where decisions involved a lot of inter-agency coordination and all levels of stress. However, this relationship did not persist in all conditions – there was no statistical difference in quality between analytical and naturalistic decision-making when any of the following conditions was also factored in: low urgency, any level of familiarity, where coordination between organisations was low, and where uncertainty about the future was low.
- To further understand the potential influence of these factors, a regression model was then done with the quality score, decision-making approach and six other factors. Each factor was then individually removed from the model to see whether it had an influence – the significance of the decision, stress and future uncertainty did not significantly impact quality score when the other factors remained (p-value 0.34), so were removed from the model. The resulting model contained decision-making approach, familiarity, urgency and current uncertainty. The model suggests that decision-making approach continues to have an impact on quality score (p-value 0.11) even when these other factors are taken into account.
- 15 Quality score is a value out of 6. The average score difference between naturalistic and analytical decision-making approaches is just 0.24. The difference is statistically significant (p-value of 0.0008), but marginal.
- 16 The observation that urgency does not seem to impact decision-making type is supported by a multinomial regression model, with decision-making type as outcome and urgency as a predictor, adjusting for multiple decisions per decision maker (likelihood ratio test, p-value=0.18).
- 17 A multinomial regression analysis with decision-making type as outcome and level of future uncertainty as predictor yields a likelihood ratio test p-value of less than 0.001 again, indicating that uncertainty in the

evolution of a situation plays a role in determining decision-making method.

- 18 This is statistically significant, and confirmed by a multinomial regression, with decision type as outcome and Q23 as predictor, adjusting for multiple decisions per decision maker (likelihood ratio p-value of less than 0.001).
- 19 The useful distinction between regular emergencies and crises is made by Leonard and Howitt, 2010.
- 20 The observation that urgency does not seem to impact decision-making type is supported by a multinomial regression model, with decision-making type as outcome and urgency as a predictor, adjusting for multiple decisions per decision maker (likelihood ratio test, p-value=0.18).
- 21 The more unfamiliar the situation, the more likely that an analytical approach will be used. A multinomial logistic regression with decision-making type as outcome and familiarity of decision, adjusting for multiple decisions per decision maker, confirms this (likelihood ratio test, p-value<0.001). This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
- 22 This is supported by a multinomial regression model, with decision-making type as outcome and uncertainty of current situation as a predictor, adjusting for multiple decisions per decision maker (likelihood ratio test p-value<0.001). This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship. A similar pattern is observed for the uncertainty of how the situation will evolve, which yields a likelihood ratio test p-value of less than 0.001 again, indicating that uncertainty in the evolution of a situation plays a role in determining decision-making method.
- 23 This is supported by a multinomial regression model, with decision-making type as outcome and experience as a predictor, adjusting for multiple decisions per decision maker, confirms this observation (likelihood ratio test, p-value=0.25).
- 24 This is supported through descriptive statistics which find that over 50% of analytic decisions were rated 3-6/6 for significance.
- 25 This is supported by descriptive statistics using a box plot. A regression model with quality score as outcome and level of consequence as predictor, adjusting for multiple decisions per decision maker, yielded a likelihood ratio test p-value of 0.09.
- 26 The difference between NDM and analytical was statistically significant (p-value of 0.0008). These p-values came from a regression model with quality as outcome and decision type as predictor, adjusting for multiple decisions per decision maker in the data.
- 27 A regression model with quality as outcome and understanding as predictor, in cases where NDM was used only, adjusting for multiple decisions per decision maker, shows that there is a significant difference in the quality depending on understanding of context, when the decision

is made using NDM (likelihood ratio test p-value<0.0001). Again, with only NDM decisions, a regression model with quality as outcome and familiarity as predictor, in cases where NDM was used, adjusting for multiple decisions per decision maker, shows that there is a significant difference in the quality depending on familiarity, when the decision is made using NDM (likelihood ratio test, p-value=0.003).

- 28 This was observed through descriptive statistics in a mosaic plot and a regression model likelihood ratio test, which gave a p-value of <0.0001.
- 29 A regression model with quality as outcome and existence of protocols as predictor, adjusting for multiple decisions per decision maker shows that there is no significant difference in the quality depending on use of procedures (F-test p-value=0.63).

Some interviewees suggested that the existence of procedures was 'always useful' and made decisions 'easier', even when they were not followed exactly. This was not necessarily because they improved the quality of the decision per se, but rather they provided legitimacy for decisions, simplified complex situations and ensured consistency in organisational activities over time and from one place to another.

Photo credit: Conal Gallagher/flickr.



A large, semi-transparent, light teal number '7' is positioned in the background, oriented vertically. The number is composed of a horizontal top bar and a diagonal stem that tapers towards the bottom.

Further findings and themes

7 Further findings and themes

In addition to the findings outlined in [Section 6](#), the research has also identified a number of important findings about group and inter-agency decision-making, as well as the role of experience and familiarity and decision-making.

7.1 The role of groups and consultation in humanitarian decision-making

As noted above, humanitarian decision-making is a highly social activity. In the study, 24% of decisions were made by a group, 57% were made by the decision maker after consultation with others, and 19% were made by the decision maker, acting alone.¹

These figures broadly replicate those in a previous ALNAP study (Knox Clarke, 2014), although in the previous study a smaller number were made by individuals acting alone: 18% were made by a group, 69% by the decision maker after consultation, and only 1% by the decision maker acting alone.

Interviews with the contributors to the study suggested that, while the categories were broadly useful, they were not clear cut, and that even those decisions recorded as ‘individual’ often had an element of discussion and consultation: ‘You talk to two or three people, “Guys, can you come to my office? It’s something urgent, please come here”. Then you can discuss quickly ... pick other people’s opinions’; ‘I just do a very short consultation with someone, before I make the decision’. As outlined in previous research, it may be more helpful to consider a continuum with autocratic, individual decision-making at one end and entirely communal decision-making at the other. As one moves along this continuum, increasing degrees of accountability and decision-making authority move from the individual leader to the group (Knox Clarke, 2013).

Box 5: Inter-agency coordination and decision-making

That humanitarian decisions are often made by, or with the involvement of, a number of people should not come as a surprise given the degree of intra-organisational and inter-organisational coordination required for humanitarian action. As noted above, in over half of cases (59%), the decisions in the study involved or required some form of input from other organisation. And even in those decisions which were about activities related only to the decision maker's own organisation, implementation would generally require the involvement of different parts of the office, or of different offices in different parts of the world: 'One has to bring in so many different departments and so many different people into any decision process ... you have to share it with the procurement team, with the management, with the logistics team ... you have to get it to the people on the ground and say "Is this possible?"'. Coordination appears to increase when there is more uncertainty in the current and/or future situation.² Analytical decisions are more likely to involve coordination with other organisations.³

When it comes to the perceived quality of decisions, participants identified those decisions with either no coordination (1/6) or the very highest level of coordination (6) as being of the highest quality.⁴ One participant summarised this, reflecting 'either we all have to be on the same page or then we manage it our own'.

For some participants, making decisions without other organisations felt more comfortable – 'I am absolutely delighted if I can make a decision that doesn't have to be discussed with other agencies. Those, to me, are the most straightforward decisions, and where I have the least amount of limitations like I didn't have to factor in ... how their mandate needs to be reflected ... I can see that you would have an obvious higher level of satisfaction with the quality of a decision that you had the freedom to take on your own'. Others discussed potentially stressful power dynamics between organisations working together where the interests of the 'stronger' organisation get pushed onto that of the other.

On the other hand, participants discussed the potential for 'a lot of backing, a lot of support, lots of ownership' when decisions were made in coordination, and another emphasised the 'different expertise and different points of view', which could come together and improve the decision when organisations worked together.

7.1.1 When are groups/other people involved in decision-making?

Both the interviews conducted for this study, and the literature review, tended to suggest that group decision-making, or consultative decision-making, were significantly slower than making decisions alone. This would suggest that group decision-making would be better suited to less urgent situations. It was surprising, then, to find that there was no evidence from the statistical tests to show that group or consultative decisions were less likely in urgent situations. In fact, the trend seemed to be the opposite: to the degree that urgency affected who made the decision, groups were less likely to make non-urgent decisions than individuals.⁵

“There did appear to be some relationship between group and consultative decisions and the degree of stress experienced by the decision maker”

A number of interviewees suggested that groups were more likely to be used in decision-making where the decision was unfamiliar to the decision maker (‘because you’re not familiar with the situation, you just have to consult, and get as much information as possible, before you decide’) or where the decision maker was uncertain as to what the outcome of the decision might be. However, the statistical tests showed no relationship between who made the decision and the degree of familiarity⁶ or future uncertainty.⁷ Similarly, there was no relationship between the significance of the decision and the degree to which it was made by or with others.⁸

One interesting finding was that there did appear to be some relationship between group and consultative decisions and the degree of stress experienced by the decision maker. Decisions made alone were slightly more likely to be categorised as low stress compared to group decisions or consultative decisions (which were slightly more likely to be categorised as high stress).⁹ However, it is not clear whether decision makers were taking more stressful decisions to the group, rather than dealing with them alone, or whether the group itself caused the stress.

7.1.2 What are the effects of group decision-making and consultation on the process and quality of decisions?

Decisions made by groups and decisions made using consultation were much more likely to use analytical methods than decisions made by the individual alone (62% of decisions, 56% of decisions and 25% of decisions, respectively). Similarly, decisions taken alone were much more likely to use naturalistic methods (12%, 14% and 49% of decisions, respectively). This, broadly, is what one would expect from the literature review, where NDM is generally seen as being an individual, rather than a group, approach (see e.g. Klein, 2009). Interestingly, at least some group decisions are being made in a ‘naturalistic’ way – that is, groups are accepting the first good option, on the basis of their (collective) knowledge of what to do.

As noted above, several interviewees suggested that group and consultative decisions took longer: ‘If I take a decision by myself, I will save time’. This was confirmed across the decision set. Decisions made by the individual alone were quicker than those made in other ways.¹⁰ However, the difference was less pronounced when looking just at analytical decisions.¹¹

“Controlling for the method used (as well as for the amount of urgency, familiarity and uncertainty) there was no evidence of a difference in quality between group, consultative and individual decisions”

With respect to quality, the statistical tests initially suggested that decisions made on the basis of consultation, or by groups, were perceived to be of less good quality than those made by the individual acting alone.¹² The difference in quality is small, however, and may relate to the relationship between analytical decision-making and group/consultative decision-making: group decisions were more commonly made using analytical decision-making methods, and were on average perceived to be lower in terms of quality.¹³ Controlling for the method used (as well as for the amount of urgency, familiarity and uncertainty) there was no evidence of a difference in quality between group, consultative and individual decisions.¹⁴ NDM decisions taken by groups and by individuals had very similar mean values.

Box 6: How does this relate to previous ALNAP research on leadership?

Previous ALNAP research (Knox Clarke, 2014) has suggested that decisions in a humanitarian context involving others should be better and more effective than decisions taken by a sole individual, for four broad reasons:

1. Additional information from colleagues would improve understanding of the situation, and so improve the relevance and quality of the decision itself
2. Relying on colleagues to support decision-making would prevent the individual decision maker from becoming overwhelmed
3. Where leadership teams are accustomed to making decisions, they would be less badly affected by changes in leadership or absences of the individual leader
4. Group and consultative decision-making would improve ‘buy in’ and support for the decision.

However, the previous research did not provide enough examples of individual decision-making to statistically test the hypothesis that additional information from colleagues would improve the relevance and quality of the decision. In addition, the previous research did not specify the type of decision being made, so findings cannot be compared like-for-like. In interviews in both the previous study and this study, decision makers repeatedly talked about the importance of multiple perspectives to provide better information, and believed that involvement of more (skilled) colleagues led to better decisions. The statistical tests conducted for this research do not demonstrate, however, that more information,¹⁵ or the inclusion of more people,¹⁶ correlate with decisions that are perceived to be better – or worse.

With respect to the other three hypothesised advantages for group/consultative decision-making outlined in the previous work, the current research was not designed to address issues related to decisions not being made, or to the effects of leaders not being present – it was designed to consider the specific decisions that specific leaders actually made. However, interviews from the previous study, as well as examples in evaluations, lend support to these arguments.

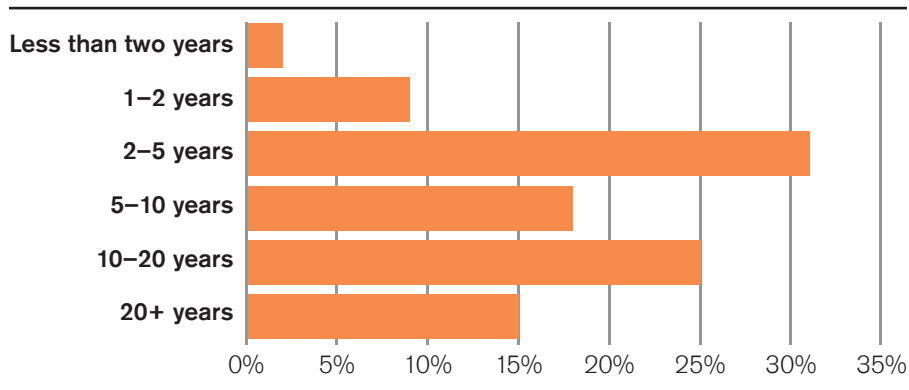
With respect to the final hypothesis (that group and consultative decision-making improve ‘buy in’ and support) this research, again, was not designed to address the question quantitatively. However, it was a point that was brought up repeatedly in interviews: the number of interviewees who mentioned this advantage was greater than the number who suggested that consultation brought better information. The following quotes are fairly typical of many: ‘If you’re making a decision in a group then there’s one distinct advantage in that everybody ... would welcome the decision. They would own it ... it doesn’t appear as if it’s been pushed down your throat’; ‘It’s [consultation] a way of ensuring that basically everyone is on board’.

7.2 The role of experience

Participants in the study were asked to identify their length of experience working in humanitarian response.¹⁷ Overall, 40% of participants had more than ten years’ experience, and only 11% had less than two years’ experience – [Figure 9](#) illustrates the full results.

During interview, participants often related their ability to use naturalistic decision-making to their level of experience – though statistical analysis did not find that people with more experience are any more likely to use NDM.¹⁸ Decision makers did emphasise the helpfulness of past experience but also explained that, ‘even if you have ... much experience, you cannot know everything, and you cannot have made every situation’.

Figure 9: Participants' level of humanitarian experience



7.3 The role of familiarity

The literature acknowledges that experience is helpful, where it matches the situation in which decision makers find themselves (Campbell and Knox Clarke, 2018). In order to better understand how often this happens, participants were asked to note how familiar the current decision situation was for them. The results show that most decisions (more than 75%) submitted to the study were familiar to the decision maker and that this familiarity was helpful. The most familiar decisions were noted as slightly better quality.¹⁹ In particular, decisions made with NDM were of better quality when they were familiar, and got somewhat worse in quality when they were unfamiliar.²⁰ As noted earlier, effective NDM requires decision makers to be able to apply appropriate previous experience, so should not be relied on when this experience doesn't exist. Decision makers reflected on this in interviews, with one noting, 'in a new situation, I first need to adjust and, in a way, sort the experiences that I have gathered in the past and see whether they are still relevant in the new location'. However, the 'cultural phenomenon' of 'replicating intervention methodologies used in previous crises without adaptation' has been documented repeatedly in literature (Colombo and Checchi, 2018: 217; Obrecht, 2019b) and remains a potential risk to good humanitarian decision-making.

“The results show that most decisions (more than 75%) submitted to the study were familiar to the decision maker and that this familiarity was helpful”

Unsurprisingly, those with more experience tend to encounter unfamiliar situations less frequently²¹, suggesting that decision makers are able to build up their experience from past responses and learn from the past (Knox Clarke and Campbell, 2018; Gonçalves, 2009). Participants noted that some experience was easily transferrable from place to place – 'I never had to decide before [on this particular scenario] but the decision to

take a lead in a project or the ability to recognise when somebody can do something or not, it's very familiar to me'.

While familiarity was related to better quality decisions, some interviewees also pointed to ways in which it could, potentially, have negative effects on decisions. During interviews, participants noted that experiencing a similar problem before did not necessarily make it easier to make subsequent decisions.

“Reflections often touched on the importance of not only past experience but of a solid, and ongoing, understanding of context”

They also suggested that there was the risk of developing a *laissez faire* attitude (or the ‘tunnel vision’ described earlier) whereby decisions became ‘less purposeful’, seen as ‘just a process, something you don’t even register’ having made a choice about. Another explained, ‘if a decision seems very familiar, you don’t think much about it and you just do it, without having really taken into consideration any differences from the last time you had to make the decision’.

These reflections often touched on the importance of not only past experience but of a solid, and ongoing, understanding of context, with one interviewee explaining, ‘Our context is not static. It keeps on changing and therefore, even if you have made a decision repeatedly, there are other external factors that keep on changing’ and another affirming, ‘the circumstances might be similar, but the context is different’.

7.3.1 Deciding to do something new

When making decisions, a decision maker is generally deciding on which course of action to take in the circumstances in which they find themselves. In many cases, this course of action will be similar to what has been done before. However, on occasion, the decision maker may decide on a completely new course of action, which they haven’t tried before. The literature review suggested that attempting a new course of action was particularly likely – and useful- when the decision maker encountered a situation which they had not experienced before, and when the individual had high levels of creativity, improvisation and openness to doing something new. The ability to identify new courses of action is described by theorists as ‘bricolage’. People who have developed these bricolage skills have the ability to ‘proceed with whatever materials are at hand’ (Weick, 1993:639).

Although only a minority of decisions were unfamiliar, and taken in conditions of uncertainty, most participants still experienced enough unfamiliar decision situations for this type of ‘bricolage’ to form an important element of their skillset. Bricolage skills have the potential to expand the range of options available to decision makers: by expanding comfort levels with new and unprecedented situations, bricoleurs are able to



The study results highlight a statistically significant relationship between being faced with new challenges and doing something new. When the situation was very certain, decision makers were considerably less likely to do anything new. Photo credit: nerovivo/flickr.

try new things and ‘test their utility, rather than deciding to implement one of a set of known options’ (Campbell and Knox Clarke, 2018:58).

During the study, decision-making participants were asked to indicate whether, as a result of making each submitted decision, they would have to do something new. 30% of decisions submitted required the decision maker to do something new,²² with 80% of participants submitting at least one decision that required doing something new.

The study results highlight – as one would expect – a statistically significant relationship between being faced with new challenges and doing something new. When the situation was very familiar, or very certain, decision makers were considerably less likely to do anything new – the proportion of decisions requiring something new decreases as familiarity increases²³ and as current and/or future uncertainty decreases.²⁴ These patterns hold across participants with different levels of humanitarian experience.

Given the potential value that bricolage skills have for humanitarian decision-making, it is worth considering the potential barriers to doing something new. One of the main barriers is that it is easier to do what you always do than to think ‘outside the box’ (Weick, 1993). Some decision makers struggle with thinking beyond their organisation’s typical ways of working, with one participant reflecting that they had perceived organisational internal processes ‘as a given’ rather than looking at potential changes of approach. Another key barrier is risk aversion – decision makers were very conscious that, as one described, ‘if it fails, you remain accountable’ for that choice, which leads them to stick with the familiar.

Decision makers consistently described a desire for learning and striving for excellence as a potential antidote to these barriers. Participants articulated that ‘you have to try something new in order to learn’ and

explained the need for creativity in situations in which ‘neither you, nor your colleagues, nor even other partners’ are familiar.

The role of a supportive organisation/buy in from colleagues was also emphasised, particularly important again due to the social nature of humanitarian decision-making. One participant explained that an unsupportive team could act as a constraint to innovation: ‘If it’s something new to you and also to the team, it becomes even more complex, because you need to get buy in from the team, because it’s a change of the way the game has been flowing’. Another suggested that a supportive team could make innovation more likely: ‘Does your team culture promote an atmosphere for reflections and learning? [If not,] this might be the reason why, for some people, they may not want to try something new’. Participants suggested that support could be found for doing something new by building allies within the organisation who are supportive, and by facing any resistance through understanding where that contention comes from. These thoughts are supported by ALNAP’s previous work on innovation, which found organisational/team culture to be an important element in supporting effective innovation processes (Obrecht with Warner, 2016). ALNAP’s emerging work on adaptiveness (Obrecht, 2019b) and complex urban environments (Campbell, 2019) so emphasise the need for organisations to actively recruit, hone and support these critical bricolage skills.

The findings of this study suggest that, while decision makers often do something new when faced with challenging circumstances (less familiar, less certain), those decisions which led to doing something new were not statistically different in quality from non-new decisions.²⁵ This suggests that doing new things in unknown, unfamiliar situations is viewed as being of the same quality as following established courses of action in known, familiar situations. This is important because often, doing something new carries greater risk.

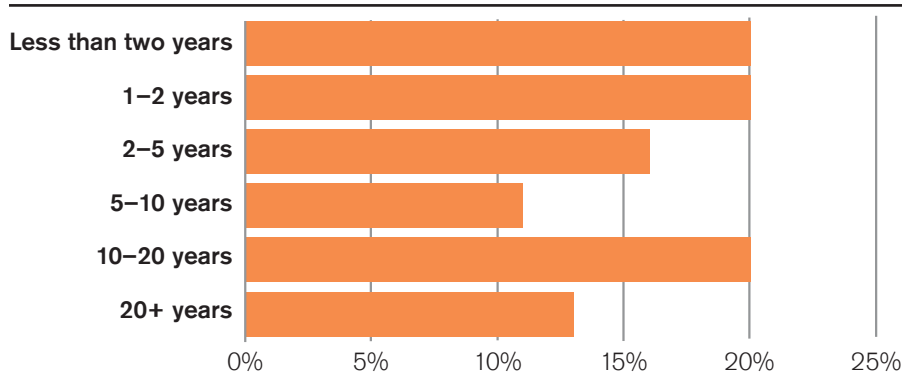
7.4 The role of contextual understanding

For many participants interviewed in this study, context was king – ‘However much you are experienced, you need to understand the context’. However, this was not the case for everyone, with some suggesting context was less important.

Among the participants in this study, 58% were international (not currently working in the country where they’re from) and the rest were national – with 13% from the area and country they were working in and 29% from a different area in the country they were working in. Participants had quite a range of in-country experience, with 33% working in the same country for over ten years and 40% with under two years’ experience in that country – see [Figure 10](#) for the full results. Compared to 20+ years of experience, less than two seems like very little but in the humanitarian sector, where many jobs last for six months or less, the perception can be different. One participant who had been working in a certain country for 14

months at the time described this as ‘having been here for a long time’ and credited this length of time with his improved understanding of the context.

Figure 10: Amount of time participants have worked in their current response context (at the time decisions were submitted)



At the start of the study, 67.5% of participants felt they understood the context quite well (five or six on a six-point scale), and 47.5% felt the current context they were working in was quite similar to their overall humanitarian experience.

Given the importance of contextual understanding (that is, understanding about the place – the politics, culture, stakeholders, economy and so on) highlighted in previous ALNAP research (Campbell, 2018), this study aimed to understand the influence of contextual understanding on decision-making. The findings suggest that understanding the context you’re working in does have a significant positive influence on decision-making,²⁶ in particular on naturalistic decision-making.²⁷

“Understanding the context you’re working in does have a significant positive influence on decision-making, in particular on naturalistic decision-making”

Unsurprisingly, decision makers who are from the country where they are working are slightly (though not statistically significantly) more likely to rate their contextual understanding as higher than international colleagues.²⁸ However, the analysis did not find a relationship between decision quality and either level of time spent working in country²⁹ or whether the decision maker was from the country where they were working.³⁰ This could be explained in a number of ways. It is, of course, entirely possible that there is no constant relationship: for some people, or in some cases, knowing the country intimately helps make good decisions, while for others it might lead – as one interviewee put it to being ‘too close to the problem’ and an inability to discard preconceived notions about certain actors or what would or would not be accepted by a community. Alternatively, long experience in the country does count, and those without

local knowledge may be taking specific actions to make up for their weaknesses – some interviewees explained how they would make use of colleagues’ contextual experience if they recognised their own was lacking. This surprising result, however, would benefit from further investigation.



In brief:

- Humanitarian decision-making in country operations is highly social. Most decisions involve a number of different people, and decisions are often inter-agency.
- Group decisions are more likely to be analytical, individual decisions are more likely to be naturalistic
- Taking into account the influence of other factors (such as urgency, familiarity, uncertainty), group decisions were no different in quality to those made by individuals.
- Decisions were better quality when they were familiar: where the decision maker(s) had experience of making decisions of that type.
- When decision makers encounter something unfamiliar, they are more likely to make decisions that lead to activities that they have not undertaken before. Doing something new in an unfamiliar situation results in similar quality decisions as doing something known in a familiar circumstance.
- Understanding context has a significant positive influence on decision-making, especially for NDM.

Endnotes for this chapter

1. The remainder were 'other' or 'decisions largely made elsewhere'. Note that the question in the previous study was slightly different – as it asked how decisions were usually made in the country office (rather than asking about each, individual, decision). Responses were also gathered from a number of people in each office, rather than solely from the decision maker, as was the case here.
2. This is supported by descriptive statistics, on examination of a mosaic plot.
3. This observation confirmed by a multinomial regression model, with decision-making type as outcome and level of co-ordination as a predictor, adjusting for multiple decisions per decision maker, which gave a likelihood ratio test, p-value=0.005. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
4. A regression model with quality as outcome and degree of co-ordination required as predictor, adjusting for multiple decisions per decision maker, yields a F-test p-value of 0.05 indicating some evidence that quality changes with co-ordination. It is important to note this relationship is weak – coordination does not impact quality to a large extent.
5. Using a multinomial regression model with 'who makes decisions' as outcome and urgency as predictor, likelihood ratio p-value of 0.05. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
6. Confirmed with multinomial regression model with who made the decision as outcome and familiarity as predictor, likelihood ratio p-value of 0.27.
7. Shown through a multinomial regression model with who made the decision as outcome and future uncertainty as predictor, likelihood ratio p-value of 0.11.
8. This is supported by descriptive statistics, on examination of a mosaic plot.
9. This is confirmed by descriptive statistics, on examination of a mosaic plot.
10. Using an ordinal logistic regression model, with time to decision as the outcome, and who made the decision and decision-making type as predictors, both predictors are significant in predicting time to make decision (likelihood ratio p-value <0.001 in both cases). In particular, decisions made alone tend to be quicker, and NDM is the fastest method making a decision.
11. This is confirmed by an ordinal logistic regression, with the amount of time the decision took as outcome and who made the decision as predictor, adjusting for multiple decisions per decision maker, and looking only at analytic decisions, which yielded a likelihood ratio

p-value of 0.03. Individuals are still quicker, but there is less difference than looking across the entire decision set.

12. A regression with quality score as outcome and who made the decision as a predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of 0.01.
13. This is supported by descriptive statistics, on examination of a box plot.
14. This is supported by descriptive statistics, on examination of summary tables, and by a regression model with quality as outcome and the decision-making type and who made the decision as predictors, showing an F-test p-value of 0.23.
15. This is supported by descriptive statistics, on examination of a box plot, and by a regression model with quality score as the outcome and level of information collected as a predictor, adjusting for multiple decisions per decision maker, which yielded a likelihood ratio test p-value of 0.69.
16. The finding of this research is that, controlling for the method used (as well as for the amount of urgency, familiarity and uncertainty) there was no evidence of a difference in quality between group, consultative and individual decisions. See footnote 89 for the statistical reference.
17. It is important to note that those with limited humanitarian experience may have had other relevant experience, such as in the development or medical sector.
18. A multinomial regression model with decision-making approach as outcome and overall amount of humanitarian experience as predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of 0.25, suggesting that there is no evidence of a relationship between amount of humanitarian experience and preference for any particular decision-making approach.
19. A regression model with quality as outcome and familiarity as predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of 0.0006. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
20. A regression model with quality as outcome and decision-making type and familiarity as predictors, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of 0.03. This indicates there is a relationship, though one with low statistical significance. Further investigation using descriptive statistics revealed the nature of the relationship.
21. A multinomial regression model with familiarity as outcome and overall amount of experience as predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of 0.0001. We must note that those with the least amount of experience (less than 2 years) don't follow this pattern, but the number of participants in this category is too low for this bucking of the trend to be statistically significant.
22. Of a total 1035 decisions.

23. A logistic regression model with whether a decision required doing something new as outcome and familiarity score as predictor confirmed this relationship, with a likelihood ratio test p-value less than 0.0001.
24. A logistic regression model with whether a decision required doing something new as outcome and uncertainty score as predictor confirmed this relationship, with a likelihood ratio test p-value less than 0.0001 for current uncertainty and 0.0004 for future uncertainty.
25. A regression model with quality as outcome and whether a decision required doing something new as predictor resulted in a likelihood ratio test p-value of 0.76.
26. A regression model with quality as outcome and how well decision makers understood the context as predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of 0.07. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
27. A regression model with quality as outcome and how well decision makers understood the context as predictor, in cases where NDM was used, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of less than 0.0001. This indicates there is a relationship. Further investigation using descriptive statistics revealed the nature of the relationship.
28. An ordinal logistic regression model with understanding of context as outcome and whether the participant was from the country where they were working as predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio p-value of 0.4.
29. A regression model with quality as outcome and amount of time spent working in that country as predictor, adjusting for multiple decisions per decision maker, yields p-value of 0.67 through a Wald test.
30. A regression model with quality as outcome and whether the participant was from the country where they were working as predictor, adjusting for multiple decisions per decision maker, yields a likelihood ratio test p-value of 0.13.

Understanding the context you are working in does have a significant positive influence on decision-making, in particular on naturalistic decision-making.
Photo credit: European Space Agency.





Conclusions and recommendations

8 Conclusions and recommendations

The aims of this research were twofold: to contribute to the evidence base about decision-making in humanitarian response, and to produce findings and recommendation about the utility and efficacy of different decision-making approaches used by humanitarians. In particular, the study sought to examine different circumstances in which humanitarian decision makers may find themselves and to capture the spectrum of operational decision-making in humanitarian response.

Using an app-based diary method complemented by literature review and interviews, the study gathered information about 1,035 decisions made by 55 decision makers across the world.

This conclusion returns to the original research questions and considers the degree to which they have been addressed.

8.1 What is the nature of humanitarian decision-making? (What decisions are made? How are decisions made? Under what conditions?)

The variety found within the decisions submitted to this study is striking. While much humanitarian attention has concentrated on certain decision types (such as decisions about the best response option to use), this study found that humanitarian professionals involved in operations make a wide variety of decisions – from whether to promote someone to whether or not to apply for a funding call, to which contractor to hire or what criteria to use for targeting. And, to the people making the decisions, many of the ‘administrative’ decisions are perceived to be every bit as significant, in terms of consequences, as the more programmatic ones.

Similarly, the circumstances under which decisions are made are diverse. Previous literature on humanitarian decision-making has suggested that humanitarian decisions are predominantly urgent, uncertain and ‘high stakes’; in fact, only one quarter of the decisions recorded fitted all three criteria. The great majority of decisions (80%) were urgent, and/or would have significant consequences (78%). But – perhaps surprisingly – only 38% took place in situations where the situation was uncertain, and less than half (49%) took place in situations where it was unclear how the situation would evolve.



The study considered three decision-making approaches – analytical, naturalistic and procedural – all of which are used in different combinations when responding to crises and disasters such as the response to Hurricane Doria in the Bahamas. Photo credit: UN Photo/Mark Garten.

With respect to the ‘how’ of decision-making, there is also significant variety. The study considered three (idealised) decision-making approaches: **analytical**, structured decision-making, where groups and individuals use formal processes to evaluate information and choose the best option; **naturalistic** decision-making, which relies on decision makers matching the situation to their previous experience, and drawing on this experience to identify a workable way forward, and **procedural** decision-making, where individuals use existing processes to determine which action to take. The first two categories – analytical and naturalistic – were perceived as being mutually exclusive, while the procedural category could be used in combination with either of the other two. The study showed that all three approaches to decision-making are used. 51.3% of the decision set fulfilled the two key conditions to be considered as analytic, while a further 20.1% fulfilled the conditions to be considered naturalistic. 50.7% of all decisions in the study used procedures, either as written or with some adaptation.

“It can be tempting for studies of decision-making to focus on the behaviour and psychological processes of the individual, but in this decision set the great majority (81%) of instances involved groups, or consultation with other individuals”

But approaches to decision-making were more diverse even than these figures suggest. There were a significant number (28.6%) of decisions which did not clearly fit any type – and even those that did, on further investigation, appeared to differ, quite substantially, from descriptions in the literature of how these types are – or should be – used. Many decisions

– both analytical and naturalistic – are not following the optimal process outlined in literature.

One further striking finding from the decision diaries that relates both to the context and the process of humanitarian decision-making was the importance of multiple actors. It can be tempting for studies of decision-making to focus on the behaviour and psychological processes of the individual, but in this decision set the great majority (81%) of instances involved groups, or consultation with other individuals. Even those decisions described as being made entirely individually included social elements of obtaining and sharing information with others. This may in part reflect the inter-agency nature of modern humanitarian work: 59% of all the decisions in the study involved some level of coordination between agencies.

8.2 Do certain decision-approaches achieve higher quality decisions overall?

While there were some limitations to measuring quality in the study, overall participants perceived their decisions taken using naturalistic methods to have been of (marginally) higher quality than those taken using analytic methods. This finding was surprising, as analytical approaches have often been seen as the ‘gold standard’ of decision-making, and the majority of interviewees expressed a preference for analytical methods. Possible reasons for, and implications of, this finding are considered below.

Another key overall finding – which also came as a surprise to the researchers – was that there was no statistically significant correlation between the amount of information collected to support a decision and the quality of the decision: more information did not consistently relate to either better, or worse, decisions. Yet participants generally expressed a preference for collecting as much information as possible before making a decision.

With respect to group decision-making, there was not a clear statistical relationship between the engagement of multiple actors in a decision and the quality of the decision. In interviews, however, participants generally preferred making decisions with the support of others – either in groups or through consultation. This was partly because, in many situations, consultative decision-making is unavoidable, but also because these forms of decision-making were perceived to spread accountability and lead to more ‘actionable’ decisions.

8.3 Do certain decision approaches achieve higher quality decisions under specific conditions?

Given the heterogeneity of the decisions made in the study, and of the conditions under which these decisions were being made, it is perhaps more useful to consider whether different approaches might be best suited to certain conditions, rather than asking which is the single 'best' approach.

“While there were some limitations to measuring quality in the study, overall participants perceived their decisions taken using naturalistic methods to have been of (marginally) higher quality than those taken using analytic methods”

The literature reviewed for this study suggested that structured, analytical approaches to decision-making are best adapted to situations where there is time to follow an analytical process, and where uncertainty about the present and future were either low, or could be addressed by collecting more information. Naturalistic approaches are described as well adapted to situations where there is limited time and less certainty about how events might unfold, but where the decision maker(s) possess experience, and are familiar with the type of decision that needed to be made.

In some ways, the results of the diary study support these findings – naturalistic approaches outperform analytical ones where the situation is urgent, but the approaches are not statistically different in low urgency suggesting that when faced with urgency, NDM will be most effective. Though, this would only be the case were the situation is also familiar, as the quality of NDM decisions decreased in unfamiliar situations.

“Many of the decisions which were categorised as ‘analytical’ did not follow best practise in terms of an analytical decision process – they were analytic decisions done badly”

Where analytical decisions were expected to outperform (in low urgency, and where seeking information could address uncertainty), the study did not find this to be the case – there was also no significant difference between the approaches where urgency was low. Perceived quality was also quite similar across different levels of current and future uncertainty, with NDM scoring slightly higher than analytical here as well, which again contrasts with what the existing literature suggests. Still, the quality of both approaches varied depending on the circumstances. Overall, the study findings support the general view expressed in the literature that each approach is better suited to different circumstances.

Importantly, many of the decisions which were categorised as ‘analytical’ did not follow best practise in terms of an analytical decision process – they were analytic decisions done badly. It is possible that, had they done so, the overall perceived quality of analytical decisions, and the perceived quality of analytical decisions in specific circumstances where time and information were both available, would have been significantly higher. It is also possible that other factors are influencing the relationship between decision-making approach and quality score, and worth emphasising again that, overall, the difference in quality scores between approaches was statistically significant, but marginal.

8.4 Recommendations: how can these decision-making approaches be used most effectively by humanitarians?

The results put forward a number of potential areas for improving decision-making in humanitarian operations.

1. Humanitarian decision makers and agencies should recognise the value of naturalistic approaches to decision-making.

In general, interviewees tended to express negative opinions about naturalistic approaches to decision-making. However, the results of this research suggest that, at the very least, the quality of naturalistic decisions is no worse than that of analytical decisions (or at least analytic decisions as currently made by many humanitarians). In line with much of the literature on emergency management, naturalistic approaches were perceived to be particularly effective in situations where a decision was required urgently about a familiar situation or problem.

Agencies and decision makers should be encouraged to trust their experience in these cases, and agencies should consider how decision makers can do so in a way which is transparent and that can be held accountable. It is important to change the focus of accountability so it is not about justifying the use of information or analysis but about justifying that the approach used was relevant at the time. Organisations should explicitly support and foster the use of naturalistic approaches where they are relevant, and support decision makers to make decisions in the most appropriate way at the time.

In addition, interviews suggest that there is room to further improve the quality of naturalistic decisions that are made in humanitarian contexts.

- Decision makers should be encouraged to actively test their assumptions as part of the decision-making process – and in particular, to consciously consider whether the situation in which the decision is being made is, in fact, similar to previous situations.
- Decision makers should also be encouraged to ‘forecast’ – to consider what the outcomes of a decision might be, and then to check the degree to which these outcomes are being achieved following the decision.

2. Analytical decision-making should be improved by following ‘good practice’ in decision-making processes.

While analytical decisions were perceived to be less good than naturalistic decisions in this study, there are still grounds for thinking that analytic processes may be important in making certain types of decisions – particularly those where time and information are available.

However, to realise the value of this approach to decision-making, agencies and humanitarian professionals should attempt to ensure that good practice is followed when making analytical decision. Organisations should invest in staff training and development to improve analytical decision-making skills. In particular, attention should be given to:

- Option generation: analytical approaches rely on choosing between options, and the decision quality can only be as good as the options that are considered. In the study, the generation of decision options was often fairly cursory and limited.
- Clarification of decision criteria: these approaches also rely on an objective consideration of all options based on pre-agreed criteria. In the study, the identification and clarification of what a ‘good decision’ would be – the criteria on which options should be considered, was often overlooked.

3. Decision makers should be encouraged to consciously choose a decision process that fits the situation.

The study confirmed the views of other authorities that naturalistic processes are particularly well adapted to situations of time pressure, where decision makers are familiar with the situation, while analytic processes are well adapted to situations where time and information are both available. While we expected, on the basis of the literature, to see that naturalistic approaches were also more effective than analytic approaches in situations of future uncertainty, the statistical tests on the results of the diary study did not show any significant difference between the two approaches in these situations.

The study also showed that decision makers are not consistently using the decision-making approaches in situations where they might be expected to perform best. In the study, participants did not use naturalistic approaches more in more urgent situations, even though these approaches are better adapted to situations where time is at a premium. They also tended to be more likely to use analytical approaches in uncertain situations, where these approaches may be less appropriate. This is one of several possible explanations for the statistical results which show differences in perceived quality between the different decision-making approaches.

Given these results, and in line with literature reviewed at the start of this research process, the study concludes that decision-making could be improved if decision makers used a conscious process to select decision-making methods. Recognising the need for different approaches, decision



Decision makers should be encouraged to consider their situations and context more critically, to take a more proactive approach to identifying decisions that need to be made. Photo credit: Thomas Hawk/flickr.

makers should consider the time available to them, the amount of uncertainty, and whether information is available to support the decision, and then determine the best decision-making approaches depending on (a conscious reflection of) what is appropriate for each decision.

4. The sector needs more clarity on when evidence will support effective decision-making, and evidence needs to be made more accessible to decision makers.

One of the more surprising findings was that there was no observable relationship between the collection and use of information and the perceived quality of decisions.

The interviews conducted with participants provided some clarification of these findings. Firstly, the information that is being sought is, in most cases, expert opinion from colleagues. Secondly, this information seeking is not exclusively, or even predominantly, intended to improve the quality of decision, but is often aimed at legitimising the decision and securing support for implementation. Thirdly, the information collected is not always 'evidential', inasmuch as it often does not refer to proving or disproving propositions ('There is need here', or 'this is the best approach to use in these circumstances') but rather to getting a general 'feeling for' a situation. And finally, where evidential information could be useful – in determining which type of response is most likely to work – decision makers are unlikely to look for reports or publications.

For those supporting the use of evidence in the sector, a number of recommendations flow from these observations:

- There is a need to be clear around the types of decisions for which evidence can be useful, and which types of information best serve as evidence for different types of decision: which types of decision benefit from research-based evidence, which from observation of previous humanitarian activities, which from primary data collection and analysis, and which from expert opinion or personal experience.¹ This will enhance attempts to ensure that decision makers are using the right type of evidence, and using evidence in situations where it can be useful.
- It is also important to recognise that humanitarians are unlikely to use research reports and articles: other channels should be found to make evidence available.
- As the most commonly used source of information is peers and co-workers, attempts to increase evidence use should concentrate on approaches to socialising evidence, rather than making it available only to senior individuals.

5. Decision makers should be encouraged to consider their situations and context more critically, to take a more proactive approach to identifying decisions that need to be made.

Participants in the study were far more likely to make decisions reactively (in response to a situation that had already happened, or because they were asked or instructed to do so) than to make proactive decisions (in anticipation of a problem, or in an attempt to improve a situation). This may relate to the nature of humanitarian work – there are simply more reactive decisions to be taken. But a number of participants suggested that a ‘reactive mindset’ also meant that they had missed the chance to address concerns before they reached a critical point.

It is easy to understand why humanitarian decision makers may not be overly proactive in decision-making, and may miss unexpected information. The number of decisions that they are already taking, the effect on organisational mandates and donor regulations on narrowing the scope of possibility (and so of decisions that are considered) and the importance that decision makers place on the opinion of colleagues who are likely to echo these constraints, all play a part. However, decision makers can improve their situational awareness, and breadth of focus, where:

- Information management processes are designed to support continuous monitoring of context and outcomes, as well as outputs of activities
- Humanitarian decision makers pay attention to a broader range of informants, in particular the individuals and communities affected by crisis
- Humanitarian agencies incentivise learning and reflection: those interviewees who discussed the importance of reflecting on previous operations also seemed to be more likely to make proactive decisions
- Humanitarian agencies consider their relative responses to failures of commission and failures of omission. Currently, failures of commission are arguably more likely to incur negative consequences than failures of omission.

By better understanding the situation, decision makers will be able to check the ‘fit’ (appropriateness) of potential decisions, and to use forecasting to test different options.

6. Decision-making is an organisational function (not just an individual one) and organisations should take active steps to improve decision-making.

The study shows that organisational factors play an important part in how individuals make critical decisions. Beyond the provision of training in decision-making, and consideration of incentive structures, humanitarian organisations should:

- Ensure clear and simple procedures are in place for commonly encountered situations, and that staff have the authority to adapt these procedures (while following their general intent) in situations where the procedures do not apply
- Clarify the decision-making authority of staff at various levels in the organisation – in interviews, clarity around decision roles was seen as an important supporting factor for effective decision-making.

7. More research is required on the best approaches to decision-making in situations that are simultaneously uncertain and unfamiliar.

This study generally supports the findings of other authorities that neither analytic nor naturalistic decision-making approaches are well-suited to situations where the decision maker has limited experience and the situation is highly uncertain. The study also finds that those decisions where decision makers tried a new approach (generally where they faced new/unfamiliar problems in uncertain circumstances) tended to be of similar quality to those using known approaches in more familiar circumstances. This suggests that creative and experimental approaches can be successful in these conditions. On this basis, we recommend further study on how decision makers can successfully implement experimental ‘bricolage’ strategies, based on iterative decision-making and the testing of new approaches in these new situations.²

Endnotes for this chapter

- 1 Expert opinion has been described as ‘the second pillar of evidence based medicine’ (Sackett, 1996:71).
- 2 The potential utility of iterative approaches, particularly in uncertain contexts, is further explored in ALNAP’s recent work on flexibility (Obrecht, 2019b).

Related ALNAP publications

- Making Operational Decisions in Humanitarian Response: A literature review
- Between Chaos and Control: Rethinking operational leadership
- Insufficient Evidence? The quality and use of evidence in humanitarian action



ALNAP

Overseas Development Institute
203 Blackfriars Road
London SE1 8NJ
United Kingdom
alnap@alnap.org