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# Exercise Common Effort 2017

## *Quality of Interaction Assessment in a Multinational, Multiagency Education Exercise*

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## **Abstract**

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Opportunities for inclusive, interagency interaction, such as education and training, are considered an important way to ensure better coordination within comprehensive missions. Still, there have been few systematic assessments of such activities. In the current research 41 members of German and Dutch governmental and non-governmental organizations and military provided their expectations concerning the quality of interaction, as well as their experience with members of different organizations during Exercise Common Effort 2017 (EX CE 2017), a 3-day scenario-based interorganizational and multinational exercise focusing on interorganizational interaction processes. Organized by the First German/Netherlands Corps (1GNC) together with the Dutch Ministry of Foreign Affairs and the Dutch Ministry of Security and Justice, the event reaches out to also include a broad representation of international and non-governmental organizations. Results indicated that all participants expected the quality of interactions between representatives of the different organizations in their theme groups to be very positive prior to the commencement of the exercise, and perceptions remained high at the end of the exercise. Specifically, ratings of information exchange, collaboration, clarity, and conflict resolution increased after the exercise, although the need for information exchange and the extent to which members of other organizations provided valuable information significantly decreased across the exercise. The findings provide valuable information on what aspects of EX CE 2017 worked well and what could be improved to increase the effectiveness of the exercise.

## **Significance to Defence and Security**

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EX CE 2017 participants reported that the event significantly fostered communication, engagement, and interaction between civilian and military participants. The exercise highlights the importance of such interaction opportunities for military and civilian partners in order to optimize their ability to effectively operate in a comprehensive mission. Although there is a need for continued systematic research in this area, these findings certainly support the continued investment in and refinement of exercises such as EX CE in future years.

## Résumé

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Les possibilités d'interactions interagences inclusives, telles que l'éducation et la formation, sont considérées comme un moyen important d'assurer une meilleure coordination dans le cadre de missions générales. Toutefois, on a procédé à peu d'évaluations systématiques de telles activités. Dans le cadre de la présente recherche, 41 militaires et membres d'organisations gouvernementales et non gouvernementales d'Allemagne et des Pays-Bas ont fait part de leurs attentes quant à la qualité des interactions, ainsi que de leur expérience auprès des membres de différentes organisations lors de l'exercice COMMON EFFORT 2017 (Ex CE 2017), un exercice interorganisationnel multinational de trois jours fondé sur un scénario et axé sur les processus d'interaction entre les organisations. Organisé par le 1<sup>er</sup> Corps germano-néerlandais (1GNC) et le ministère de la Sécurité et de la Justice des Pays-Bas, l'événement s'adressait également à un vaste éventail d'organisations internationales et non gouvernementales. Les résultats ont révélé qu'avant le début de l'exercice, tous les participants s'attendaient à une très bonne qualité des interactions entre les représentants des diverses organisations au sein de leurs groupes thématiques, une impression qui était toujours positive à la fin de l'exercice. En particulier, les cotes attribuées aux échanges d'information, à la collaboration, à la clarté et à la résolution de conflits étaient plus élevées après l'exercice, même si la nécessité d'échanger de l'information et la mesure dans laquelle les membres d'autres organisations fournissaient de précieux renseignements avaient diminué considérablement au cours de l'exercice. Les constatations de l'étude fournissent de précieuses données sur les aspects de l'Ex CE 2017 qui ont bien fonctionné et sur ceux qui pourraient être améliorés afin d'accroître son efficacité.

## Importance pour la défense et la sécurité

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Les participants à l'Ex CE 2017 ont signalé que l'événement avait considérablement favorisé la communication, la mobilisation et l'interaction entre les civils et les militaires. L'exercice a fait ressortir l'importance de telles possibilités d'interaction entre les partenaires civils et militaires pour optimiser leur capacité à fonctionner efficacement dans le cadre de missions générales. Bien qu'il soit nécessaire de poursuivre la recherche systématique dans ce domaine, les constatations de l'étude appuient certainement l'investissement continu dans des événements tels que l'Ex CE et le perfectionnement de ce type d'exercice dans l'avenir.

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# 1 Introduction

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Since the end of the Cold War, crises have been marked by increased complexity, characterized by the complete or widespread breakdown of existing national, regional or societal governance, economic and security institutions, and the displacement and/or loss of life in the civilian population. These harsh realities often arise from, and are maintained by, a combination of toxic and volatile interrelation of political motivations, environmental degradation, social and economic inequality, ethnic rivalry, religious extremism, and terrorism. Follow-on effects include famine, housing shortages, public health and medical emergencies and, often, violations of human rights (Interagency Standing Committee Working Group, 1994; OCHA, 1999; World Health Organization, 2002).

Many western governments, as well as international bodies such as the United Nations, the European Union and the North Atlantic Treaty Organization, have recognized that effective responses to such complex emergencies “require [the] unparalleled integration, coordination, and cooperation of the international community” (Burke, 2005, p. 7). Accordingly, they have adopted what is most often called a Comprehensive Approach (CA) to operations defined as “the cross-governmental generation and application of security, governance and development services, expertise, structures and resources over time and distance in partnership with host nations, host regions, allied and partner governments and partner institutions, both governmental and non-governmental” (Lindley-French, Cornish, & Ratmell, 2010, p. 2; see also de Coning, 2010; Essens, Thompson, Febraro, Baranski, & Vogelaar, 2013; NATO HFM-236, 2014).

Although considered to be an important enabler to ensure mission success in an increasingly complex mission environment (Leslie, Gizewski, & Rostek, 2008; Lindley et al., 2010; Rostek & Gizewski, 2011; U.S. Joint Staff J7, 2013), a number of challenges to smooth and effective CA missions have existed. Conflicting political agendas, or at least incompatible objectives, organizational structure disparities (hierarchical and centralized vs. flat and decentralized), incompatible financial, knowledge management and communication systems, little or no corporate memory, few formal lessons learned mechanisms, poor funding and personnel shortfalls, as well as “competition for resources and agency profile” (Olsen & Gregorich, 2007, p. 13) are all documented challenges to effective coordination in comprehensive operations (see also DeConing, 2008; Morcos, 2005; Patrick & Brown, 2007; Spence, 2002; Stephenson & Schnitzer, 2006; Winslow, 2002). All of these factors have contributed to increased tensions among civilian government workers, military personnel, and aid workers. Despite strategic-level endorsement, the individual successes that have occurred have been seen as the result of a lucky confluence of like-minded actors in a mission area (Olson & Gregorian, 2007; Patrick & Brown, 2007; Rietjens, 2008). Thus, there is a clear need to understand and facilitate the interaction dynamics among the representatives of government departments, International Organizations (IOs), Non-Governmental Organizations (NGOs) and military personnel working in these challenging missions.

Practitioners and researchers alike have suggested that inclusive, interagency education and training opportunities are one important way to ensure better coordination within comprehensive missions. Such activities are thought to encourage information sharing and the development of shared understanding of each other’s cultures, norms, priorities and constraints (e.g., Brännström, cited in Halpin, 2014; Jenny, 2001; Mockaitis, 2004; Spence, 2002; Svoboda, 2014) prior to

facing the time pressure, high risk and stress of operations. Effective CA training should increase awareness, knowledge and understanding of other players in the mission space and an acceptance of the various degrees of interaction among them. Not surprisingly, the number of interagency education and training opportunities for the range of actors who work in CA missions has increased. As positive a development as this is, it is also the case that there have been relatively few systematic assessments of such education and training.

Indeed, the present authors have sought to address this issue in past research; for instance, the Collaboration Group<sup>1</sup> at the Toronto Research Centre within Defence Research and Development Canada (DRDC – Toronto Research Centre) has conducted a series of studies that assessed participant perceptions of the quality of education and training provided within selected Canadian CA education and training activities (Thompson, Febbraro, & Blais, 2011; Thompson, Febbraro & Holton, 2012; Thompson, Piasentin & Febbraro, 2015; Thompson, Piasentin, Febbraro, Holton, Gill & Eustace, 2013: see also Febbraro, Piasentin, Thompson & Turnbull, 2012). Results suggested a variety of benefits that were accrued as a result of participation in these activities, particularly increasing a needed awareness of the objectives, goals, responsibilities and constraints and the mandates of the various groups that will likely interact in a future mission or crisis. Such knowledge makes people more positive about their participation in current and future inter-organizational missions. Indeed, such opportunities appeared to be particularly beneficial to those participants, usually civilians, who had lower levels of prior contact with members from other departments and less prior experience in inter-organizational settings (Thompson, et al., 2011; Thompson, et al., 2012; Thompson, et al., 2015). Similarly, at the Netherlands Organization for Scientific Research (TNO), Essens and colleagues (Essens, 2011; Essens, DeVries, Everts, & Rietjens, 2012; Essens & Thönissen, 2015) have also studied cooperation between the military and civil parties in the operational context. From observations and assessments during military exercises that have included civil actors (in the period 2010–2014), Essens and Thönissen concluded that the complexity of the interaction between the military and civil parties was grossly underestimated by all parties. Dedicated investment in building cooperation ‘before we meet in a crisis’ was (still) rather superficial given its complexity, despite good will and good intentions. One issue is the format of preparatory interactions that would most effectively and efficiently develop the requisite knowledge, experience and skills for interaction interact with diverse organizations. For instance, to what degree do conference-type formats improve civil-military relations relative to a semi-realistic exercise following a ‘train as you fight’ concept (as CPX or FTX<sup>2</sup>) (Rietjens, van Fenema, & Essens, 2016)? Moreover, what specific concepts or formats best advance civil-military cooperation? Are there new training and exercise concepts emerging that may provide effective settings for building cooperation (Thönissen et al., 2014; Essens & Thönissen, 2015)? The current study continues this research and represents a collaborative research effort between DRDC and TNO. In this case, we explore perceptions of interaction and education effectiveness before and after an international interagency interaction exercise: Exercise Common Effort 2017 (EX CE 2017).

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<sup>1</sup> Formerly the Organizational Behaviour Group.

<sup>2</sup> Command Post Exercise (CPX); Field Training Exercise (FTX).

## 1.1 Exercise Common Effort

Exercise Common Effort (EX CE) is a 3-day scenario-based interorganizational activity developed and organized by the First German/Netherlands Corps (1GNC) together with the Dutch Ministry of Foreign Affairs, the Dutch Ministry of Security and Justice, and a broad representation of IO/NGOs, and with the support of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the German Federal Foreign Office. Building on experience with civil-military exercises from 2010 onward, a new exercise concept was developed by TNO and 1GNC that allowed for rich multi-organizational interaction, in a short time, using a relevant, topical scenario. Fielded in 2015, “[t]he purpose of Exercise Common Effort is to promote effective mutual interaction and to develop a comprehensive understanding concerning today’s challenges in international crisis situations, promoting whole-of-society involvement” (Essens & Thönissen, 2015, p. 2). EX CE then is intended to “provide a platform for exchange and cooperation between organizations that share the idea of comprehensive consultation, cooperation and preparation to improve stability, safety and security” (Essens & Thönissen, 2015, p. 2). The CE concept is based on a broad and inclusive representation of and feedback from civil and military parties. As of 2015, CE has focused its yearly exercise on a current international crisis (respectively: South Sudan, Libya), with civil and military attendees breaking down into smaller discussion groups, each based on a separate theme related to the crisis. In addition to the exercise concept, the objectives and work within CE has been formally recognized and codified by the establishment of the Common Effort Community in 2015, which now has a membership of 53 government, civilian, military and private organizational signatories from Germany and the Netherlands.

The CE 2017 scenario centred on the improved civil and military understanding of working together regarding the stabilization of a post-conflict Iraq. Six working groups discussed issues related to one of six themes: 1) Reconciliation; 2) Security and Civil-Military Cooperation; 3) Development/Basic Services; 4) Governance; 5) Humanitarian Relief; and 6) the Influence of Regional Actors. Each of the six working groups had representatives from civilian governmental departments, non-governmental and international organizations, and military personnel. In addition, each group had two facilitators from the participating organizations, who were to design the overall approach that the group would take and to lead and guide discussion within the group. Each group was also tasked with presenting the results of their discussion in their theme area in a plenary session at the end of the exercise. An overview of the agenda for the exercise is provided in Annex A.

## 1.2 The Current Study

Members of the Collaboration Group of DRDC – Toronto Research Centre (the first two authors of this report) were invited by Dr. Peter Essens, one of the Exercise Common Effort originators and organizers, to conduct an assessment based upon the previous participation of the principal researcher (Dr. M. M. Thompson) in Canadian interagency education assessments and her membership in NATO RTG-227 ‘Building Effective Collaboration in a Comprehensive Approach,’ which Dr. Essens chaired (Essens, Thompson, Karrasch, Jermalavičius, & Wesselingh, 2016).

Although noted as integral to effective interaction on comprehensive missions, to date no scale exists to assess this construct. Hence, one product of NATO RTG-227 was an initial set of items that were developed to assess a variety of indicators of effective interaction as a basis for coordination and cooperation within the diverse organizations that can contribute to CA missions (the Quality of Interaction Assessment or QIA; Karrasch, Essens & Thompson, 2016). Thus, the current study also serves as the first application of QIA items, selected from the initial pool of QIA items for their relevance to the specifics of the activities in EX CE 2017, rather than items that are intended to assess interagency interactions during an actual comprehensive mission.

## 2 Method

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### 2.1 Participants

All attendees of the 2017 Common Effort Exercise were eligible to volunteer for this study. In total, 121 (74 civil and 47 military) attendees from 50 organizations representing German and Dutch ministries, IOs, private parties, the police and the armed forces participated in EX CE 2017. A total of 58 volunteers completed the Pre-Exercise Survey and 66 completed the Post-Exercise Survey. Of these respondents, 41 provided both Pre- and Post-Exercise Surveys that could be matched via their respondent-generated unique PIN. The demographics of the respondents, collected as part of the Pre-Exercise Survey and broken down by organization type (Government Organization, Military, Non-Governmental Organization) are summarized in Table 1. As indicated, respondents were between 18 and 50+ years with the majority (n = 28) indicating that they were between 40 and 50+ years of age. The majority of the respondents were male (n=22; females, n = 8)<sup>3</sup> and currently worked for the military (n = 22); non-governmental organizations (n = 8); or governmental organizations (n = 3). Most respondents reported being at least somewhat familiar with the term Comprehensive Approach (n = 30), with 22 respondents indicating that they had a great deal or complete familiarity with the term. Twenty-four respondents had participated in a previous Common Effort Exercise. Seven respondents indicated they had never deployed on a CA mission, while 16 respondents indicated that they had participated in 3+ previous CA missions.

Pre-Exercise Survey respondents indicated a range of interaction with other civilian organizations in prior missions: 9 indicated that their activities and interaction were *coordinated* (i.e., their organization sought and received information from and synchronized their activities with the wider mission team), 10 indicated that they *cooperated* (i.e., their organization had provided and received information from other civilian actors that influenced their own organization's planning), and 9 endorsed the *informed* option (i.e., their organization was provided information by other civilian actors but was not involved in making plans or decisions). Three other respondents indicated that their prior missions were best described as *fully integrated* (i.e., their organization had been fully integrated into planning, operational execution, information sharing, situational updates, etc.), while a single individual reported that no interaction had occurred. Regarding the degree of interaction with military actors during previous missions, 13 respondents characterized these as *integrated*, 7 as *coordinated*, and 7 as *cooperated*. One respondent described their degree of interaction as being *informed* and a further 2 respondents indicated that they had no interaction with military actors during prior missions.

### 2.1 Procedure

The general approach to this study followed that used in DRDC – Toronto Research Centre's previous education and training assessments in which participants provided their expectations prior to the commencement of the exercise in a Pre-Exercise survey (Annex B). Once completed, participants returned the pre-Exercise survey to the research team. On the final day of the exercise, after the completion of the working/theme groups, participants were invited to complete

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<sup>3</sup> Many respondents did not indicate their gender.

a Post-Exercise Survey<sup>4</sup> (see Annex C). All study materials and methods used in this research were reviewed and approved by the DRDC Human Research Ethics Committee.<sup>5</sup>

**Table 1: Demographic data for Ex CE 2017, matched sample (N=41).**

Demographic Variable	Demographic Category	GO	MIL	NGO	Total
		3	22	8	33
Age (N=33)	18–29 years	1	1	0	2
	30–39 years	0	2	1	3
	40–49 years	1	7	2	10
	50+ years	1	12	5	18
Gender (N=33)	Female	2	1	5	8
	Male	1	21	0	22
	Did Not Answer	--	--	--	--
Prior CA Missions (N=31)	None	1	4	2	7
	One	0	5	0	5
	Two	0	3	0	3
	Three or more times	1	10	5	16
Attended prior EX CE (N=34)	Yes	0	11	5	16
	No	2	13	3	18
Familiarity with term Comprehensive Approach: (N=32)	Not at all	0	0	1	1
	A little	0	1	0	1
	Somewhat	1	4	3	8
	A Great Deal	1	8	4	13
	Completely	1	7	1	9
Degree of interaction with other civilian actors in previous CA (N=32)	Integrated	0	1	2	3
	Coordinated	1	6	2	9
	Cooperated	2	5	3	10
	Informed	0	7	2	9
	No interaction	0	1	0	1
Degree of interaction with other military actors in previous CA (N=30)	Integrated	0	12	1	13
	Coordinated	0	5	2	7
	Cooperated	2	3	2	7
	Informed	0	1	0	1
	No interaction	0	0	2	2

Note: not all respondents provided answers to each demographic item.

<sup>4</sup> The final page of the Post-Exercise Survey package contained an Expression of Interest in Future Participation Form which would allow for the possibility of follow-up with interested persons at a later date. The purpose of the follow-up is to contact participants 3–6 months subsequently to determine whether and the extent to which they have had an opportunity to use any of the information, knowledge and/or skills they acquired in Exercise Common Effort in their work lives. At the time of this writing the follow-up phase had not been conducted and so this will not be discussed further in this report.

<sup>5</sup> A separate observation and lessons learned activity was conducted by TNO and will be presented in a separate report by TNO researchers.

## 2.2 Materials

**Pre-Exercise Survey:** As presented in Annex B, the pre-survey began with a written introduction to the study and instructions for completing the survey. Initial questions solicited demographic information and asked about participants' past experience regarding comprehensive approach missions and their degree of familiarity with the term "Comprehensive Approach" (1—Not at all, 2—A little, 3—Somewhat, 4—A great deal, 5—Completely). They were also asked to briefly define the Comprehensive Approach. Respondents were also asked to characterize the degree of interaction with other civilian and military actors in their prior missions. Answer options to these questions included *integrated* ('your organization was fully integrated into planning, operational execution, information sharing, situational updates,' etc.), *coordinated* ('your organization sought and received information from the wider mission team, and synchronized your plans and activities'), *cooperated* ('your organization provided or received information from the wider mission team that influenced your own organization's plans'), *informed* ('your organization was provided information by the wider mission team but was not involved in making plans/decision/activities'), or *no interaction* ('your organization was not informed or included in information sharing and decision making'). Twenty-four items from the draft QIA survey (Karisch et al. 2016) were selected for inclusion in the current study based on their relevance to the objectives of, and the methodology used in, Exercise Common Effort. In the Pre-Exercise survey all items were worded to reflect their expectations regarding Exercise Common Effort, specifically in terms of the quality of interaction that they anticipated between the individuals who represented the different organizations that attended the exercise. Twenty-one items were positively worded and 3 items were negatively worded and all items were scored on a 1 (Strongly disagree) to 7 (Strongly agree) scale, with a 'Not applicable' option.

**Post-Exercise Survey:** The Post-Exercise survey (Annex C) assessed participants' experience in their theme group discussions. Questions again focused on the perceived quality of interaction among participants representing different organizations in the theme groups. In general, the same questions were asked in the Pre- and Post- surveys, amended to reflect expectation (in the Pre-Exercise survey) versus experience (in the Post-Exercise survey) and to assess selected changes over the exercise.

## 3 Results

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### 3.1 Overview

Due to the small total number of survey respondents traditional approaches to item analyses such as reliability and factor analyses could not be conducted. Still, we wished to group the items under general nominal themes in order to organize the results for the reader. Thus, we initially organized the data for the 24 QIA items under the following nominal general themes related to factors associated with the quality of interaction, with the specific groupings of items within themes based on the face validity of the items: Information Exchange (7 items), Collaboration (5 items), Perspective Taking (3 items), Conflict/Conflict Resolution (3 items), Trust (3 items), and Clarity (3 items).

We will present descriptive results for each of the items within these six themes to provide an overall summary of the basic features of the data set. We then present the results of a series of t-tests comparing means for the Pre- versus Post-Exercise survey items to determine if responses on QIA items changed over the course of EX CE 2017, anticipating that participating in the exercise should lead to increases in the positive quality of interaction.

We took an exploratory approach to the analyses because (a) this study is the first analysis of the draft QIA survey items, and (b) because of the relatively small size of the sample. As a result, we elected to use mean substitution for missing data, and for the paired comparison analyses we used a liberal probability value of .10<sup>6</sup> and did not control for the effects of multiple comparisons. We also included Cohen's *d* ( $\delta$ ) values (Cohen, 1988; Sawilowsky, 2009) to indicate the strength of the relationship (i.e., the effect size) between the variables for each statistically significant or marginally significant comparison.

### 3.2 Descriptive Results<sup>7</sup>

The averages and standard deviations calculated for each item across the matched sample revealed that most participants had quite positive expectations prior to the beginning of the exercise (all *M*'s above 4.3 out of a possible score of 7). As Table 2 indicates, the means for each of the 21 pro-trait (i.e., positively worded so that agreement equals a more positive quality of interaction for that item) QIA items were high and positive, and averages for the 3 con-trait items, (i.e., negatively worded items) were low, as would be expected. Specifically, respondents agreed that there would be a need to interact and work with members of other organizations in order to achieve the goals of their theme group, and that the interactions and collaborative activities in their theme group would be positive. They also indicated that they would try hard to understand multiple perspectives raised in their theme groups, and that the results or products of the theme group would reflect multiple perspectives. Finally, they expected that conflicts or disagreements

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<sup>6</sup> A power analysis indicated that a total of 36 participants has a 90% chance of detecting an effect of .50 (Cohen, 1988) when employing the .10 criterion of statistical significance (Faul, Erdfelder, Lang, & Buchner, 2007).

<sup>7</sup> For completeness we have included frequencies and the percentages for each of the response categories for each QIA item grouped according to QIA theme in Annexes D and E.

within their theme group would be infrequent and worked out in mutually acceptable ways. While results for all 24 items were positive, two items had means that were lower than a 5 out of a possible 7. Both of these items related to exercise objectives (The objectives and results of my theme group are clear to me,  $M = 4.47$ ,  $SD = .958$ ; Tasks and responsibilities of my theme group were clear to me,  $M = 4.83$ ,  $SD = 1.061$ ).

**Table 2:** Descriptive results for pre- and post- exercise QIA items, matched sample ( $N=41$ ).

#	THEME/Item	Pre/Post	M	SD
<b>INFORMATION EXCHANGE</b>				
1	Achieving my theme group's goals requires information exchange with representatives of other organizations	Pre	6.41	.77
		Post	6.03	.94
2	Need to work closely with reps from other organizations to achieve theme group goals	Pre	6.35	.85
		Post	6.03	1.11
3	Rarely need to check or work with representatives from other orgs in my theme group (reversal)	Pre	1.98	1.29
		Post	1.97	1.28
8	Info sharing in theme group informal and flexible	Pre	5.87	.93
		Post	6.32	.90
9	High level of info sharing between reps of different orgs in my theme group	Pre	5.64	.79
		Post	5.67	1.19
14	Importance of info sharing emphasized in my theme group	Pre	6.26	.58
		Post	5.57	1.17
17	Easy to collect info I need from reps of other orgs in my theme group	Pre	5.05	1.05
		Post	5.39	1.35
<b>COLLABORATION</b>				
7	Easy to interact with reps of other organizations in my theme group	Pre	5.45	.92
		Post	6.08	1.10
15	The importance of building solid relationships emphasized in my theme group	Pre	5.26	1.18
		Post	5.19	1.43
16	The importance of collaborating with reps from other organizations in my theme group emphasized	Pre	5.89	.70
		Post	6.64	1.09
21	No problems in coordinating with reps of other organizations in my theme group	Pre	4.77	1.35
		Post	5.63	1.49
23	Constructive discussion with representatives of other organizations in my theme group	Pre	6.05	.67
		Post	5.92	.93
<b>PERSPECTIVE TAKING</b>				
18	Theme group results include multiple perspectives	Pre	5.62	1.08
		Post	5.92	1.25
19	I try hard to understand the perspectives of reps from other organizations, even when my views differ	Pre	6.08	1.03
		Post	5.74	1.18
20	I try hard to understand reasoning even if conflicting opinions are put forward by reps from other orgs	Pre	6.21	.75
		Post	6.13	.84
<b>CONFLICT AND CONFLICT RESOLUTION</b>				
10	Problems in communication between representatives of other organizations in my theme group (reversal)	Pre	3.38	1.30
		Post	2.51	1.32
22	Miscommunications with representatives from other organizations occur often (reversal)	Pre	3.31	1.36
		Post	2.46	1.41
24	Issues between representatives of other organizations in my theme group discussed and worked out in mutually acceptable decisions.	Pre	5.59	1.09
		Post	5.89	.92

#	THEME/Item	Pre/Post	M	SD
<b>TRUST</b>				
11	Count on representatives of other organizations in my theme group for help regarding difficulties with our tasks	Pre	5.54	1.07
		Post	5.38	1.35
12	Representatives of other organizations in my theme group supply relevant information to produce good results in my theme group	Pre	6.10	.67
		Post	5.61	1.48
13	Rely on representatives of the other organizations in my theme group to take my interests into account.	Pre	5.35	1.21
		Post	5.61	1.27
<b>CLARITY</b>				
4	Objectives and results of my theme group clear to me	Pre	4.47	.96
		Post	5.63	1.11
5	Tasks and responsibilities of my theme group clear to me	Pre	4.83	1.06
		Post	5.41	1.06
6	Clear how my home organizations objectives relate to the objectives of my theme group	Pre	5.31	1.18
		Post	5.62	1.34

Note: All QIA items used a 1–7 point scale.

Results for the Post-Exercise survey, also presented in Table 2, remained very positive; means were all above a 5 out of a possible score of 7, with the highest means being 6.64 and 6.32 (collaboration with representatives of the other organizations in the theme group was emphasized, and information sharing between representatives of the different organizations was informal and flexible, respectively). While still above a score of 5 out of 7, the lowest scores were 5.39 (easy to collect required information from representatives of other organizations in my theme group) and 5.41 (the tasks and responsibilities of the theme group were clear).

### 3.3 Expectations Versus Experience in EX CE 2017: Pre- Versus Post-Survey Comparisons

Paired comparison t-tests on each Pre- and Post-Exercise survey item were conducted to determine if there were any changes in perceptions of the quality of interaction across the course of the exercise. As summarized in Table 3, results revealed that some changes in respondents' perceptions occurred over the course of EX CE 2017. These changes were evident within each of our nominal QIA themes, with Cohen's *d* ranging from -.07 to -.32, which according to Cohen (1988; see also Sawilowski, 2009) would be small effect sizes.

More specifically, as indicated, information sharing was rated as being significantly more flexible and informal and the emphasis on the importance of information exchange within the theme groups significantly increased on the Post-Exercise survey, relative to Pre-Exercise survey averages. Similarly, within the collaboration theme, the perceived ease of interaction with representatives of different organizations significantly increased, and ratings of problems coordinating with representatives of other organizations in one's theme group significantly decreased from pre- to post-exercise ratings. There was also a marginally significant increase in perceptions of the extent to which multiple perspectives were included in theme group results. Regarding level of conflict, average ratings of communication problems and miscommunications between representatives of other organizations in the theme groups both significantly decreased from the Pre- to the Post-Exercise survey. Finally, the perceived clarity of the objectives, and the

results of, as well as the tasks and responsibilities of, the theme groups, both significantly increased over the course of the exercise.

Three results were not in the expected direction: ratings of the degree to which information exchange with representatives of other organizations was necessary to achieve the theme group's objectives significantly decreased between the pre- and post- surveys, and there was a marginally significant decrease in ratings of the need to work closely with representatives of other organizations on the Post-Exercise survey. Finally the degree to which the representatives of other organizations in the theme group provided valuable information to the theme group's objectives also significantly decreased post-exercise, relative to pre-exercise averages.

The relatively small sample size ( $n = 41$ ) and the small and unequal demographic group sizes (see Table 1) precluded the possibility of conducting fine-grained analyses, save for those who had previously participated in an EX CE ( $n = 24$ ) versus those who were participating in EX CE for the first time ( $n = 31$ ). We conducted exploratory 2 (past vs. first Common Effort experience) x 2 (Pre- vs. Post-Exercise QIA response) ANOVAs for each of the QIA items, but 22 of these yielded no significant differences between these groups.

**Table 3: Paired comparisons t-tests for QIA items by theme, matched sample (N=41)**  
*(negative sign means higher score at post-exercise survey).*

#	QIA Item	M	SD	Std. Error Mean	95% Confidence Interval		t	df	Sig (2-tailed)	Cohen's d
					Lower	Upper				
<b>INFORMATION EXCHANGE</b>										
1	Achieving my theme group's goals requires information exchange with representatives of other organizations	.385	1.08	.168	.045	.724	2.287	40	<b>.028**</b>	<b>.11</b>
2	Need to work closely with reps from other organizations to achieve theme group goals	.323	1.15	.179	-.039	.686	1.804	40	<b>.079*</b>	<b>.07</b>
3	Rarely need to check or work with representatives from other orgs in my theme group (reversal)	.027	1.77	.291	-.564	.618	.004	40	n.s.	
8	Info sharing in theme group informal and flexible	-.441	1.11	.173	-.792	-.091	-2.546	40	<b>.015**</b>	<b>.13</b>
9	High level of info sharing between reps of different orgs in my theme group	-.026	1.16	.182	-.393	.341	-.142	40	n.s.	
14	Importance of info sharing emphasized in my theme group	.695	1.13	.176	.340	1.051	3.954	40	<b>.001***</b>	<b>.26</b>
17	Easy to collect info I need from reps of other orgs in my theme group	-.343	1.39	.218	-.783	.096	-1.578	40	n.s.	
<b>COLLABORATION</b>										
7	Easy to interact with reps of other organizations in my theme group	-.629	1.11	.173	-.979	-.279	-3.633	40	<b>.001 ***</b>	<b>.23</b>
15	The importance of building solid relationships emphasized in my theme group	.074	1.48	.231	-.394	.541	.318	40	n.s.	
16	The importance of collaborating with reps from other organizations in my theme group emphasized	.255	1.14	.179	-.106	.616	1.426	40	n.s.	
21	No problems in coordinating with reps of other organizations in my theme group	-.862	1.92	.299	-1.467	-.257	-2.88	40	<b>.006 ***</b>	<b>.16</b>
23	Constructive discussion with representatives of other organizations in my theme group	.128	1.12	.175	-.226	.481	.731	40	n.s.	

#	QIA Item	M	SD	Std. Error Mean	95% Confidence Interval		t	df	Sig (2-tailed)	Cohen's d
					Lower	Upper				
<b>PERSPECTIVE TAKING</b>										
18	Theme group results include multiple perspectives	-.315	1.129	.179	-.676	.046	-1.765	39	<b>.085*</b>	<b>.07</b>
19	I try hard to understand the perspectives of reps from other organizations, even when my views differ	.334	1.425	.223	-.116	.783	1.500	40	n.s.	
20	I try hard to understand reasoning even if conflicting opinions are put forward by reps from other orgs	.082	.757	.118	-.157	.321	.696	40	n.s.	
<b>CONFLICT AND CONFLICT RESOLUTION</b>										
10	Communication problems between representatives of different organizations in my theme group (reversal)	-.790	1.255	.204	-1.202	-.377	-4.364	40	<b>.001***</b>	<b>.32</b>
22	Miscommunications with representatives from other organizations occur often (reversal)	-.703	1.525	.251	-1.211	-.367	-3.570	40	<b>.001***</b>	<b>.24</b>
24	Issues between representatives of other organizations in my theme group discussed and worked out in mutually acceptable decisions.	-.305	1.228	.192	-.692	.083	-1.588	40	n.s.	
<b>TRUST</b>										
11	Count on representatives of other organizations in my theme group for help regarding difficulties with our tasks	.157	1.455	.227	-.302	.616	.689	40	n.s.	
12	Representatives of other organizations in my theme group supply relevant information to produce good results in my theme group	.493	1.276	.199	.091	.897	2.479	40	<b>.017*</b>	<b>.12</b>
13	Rely on representatives of the other organizations in my theme group to take my interests into account	-.261	1.281	.200	-.665	.143	-1.304	40	.200	
<b>CLARITY</b>										
4	Objectives and results of my theme group clear to me	-.889	1.36	.212	-1.318	-.460	-4.190	40	<b>.001 ***</b>	<b>.29</b>
5	Tasks and responsibilities of my theme group clear to me	-.580	1.36	.213	-1.09	-.150	-2.725	40	<b>.010 **</b>	<b>.15</b>
6	Clear how my home organizations objectives relate to the objectives of my theme group	-.310	1.40	.218	-.750	.130	-1.421	40	n.s	

## 4 Discussion

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Interagency training and education has been suggested as a strategy to mitigate the differences among the range of civil and military players in a comprehensive approach mission. Such activities are assumed to be beneficial because they will increase participants' awareness of the objectives, goals, responsibilities, and mandates, as well as the constraints of the various groups that will likely interact in a future mission or crisis. Knowing who, what and why regarding others in the mission area fosters understanding and positivity concerning participation in current and future inter-organization missions.

We assessed participants' expectations and perceptions of the quality of interaction between representatives of different organizations in the context of EX CE 2017, an intensive 3-day interorganizational interaction exercise conducted under the auspices of the First German-Netherlands Corps, the Dutch Ministry of Foreign Affairs, the Dutch Ministry of Security and Justice, and a broad representation of IO/NGOs, with involvement of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the German Federal Foreign Office. More specifically, the night before the exercise began we asked participants to provide their expectations concerning the quality of the upcoming interactions as measured by QIA 24 items. They were then asked to respond to the same 24 items, in terms of the quality of interaction that had occurred within their theme group during the 3 days. Results indicated that participants expected the quality of interactions between representatives of the different organizations in their theme groups to be very positive prior to the commencement of the exercise. Means for all 24 QIA items were 4.62 or above out of a possible 7. Average scores on the Post-Exercise survey (5.19 or above) revealed that theme group participants' perceptions remained high at the end of the exercise on all of the QIA items.

Additional paired comparisons analyses allowed us to explore any changes in participants' perceptions over the course of the exercise. Specifically, aspects of information exchange, collaboration, clarity, and conflict resolution increased after the exercise. Notably, three results were contrary to expectations, in that respondents' perceptions of aspects of information exchange (3 items) significantly decreased after the exercise. At this point we believe that these latter results may be attributed to the composition of the theme groups and the nature of their objectives. Regarding theme group composition, general feedback suggested that many participants were inexperienced in their jobs with their home organization and certainly concerning the situation in Iraq. Therefore, while the tone of the discussions in the theme groups was positive, the sharing of scenario-specific knowledge and information may not have occurred. With respect to theme group objectives, the discussions were to establish communication between the group members versus developing a product or solution. However, because each of the working groups was tasked with providing a presentation on its work, some members seemed to have focussed on working towards a tangible product. Given the complexity of the scenario and (the intended) diversity of the group, this may have impacted opportunities for engaging in information exchange negatively in some cases. Of course, it might also be that, given organizational differences in mandates and expected goals, there may be differences and miscommunication regarding what counts as pertinent information.<sup>8</sup> Whatever the underlying causes, future iterations of the EX might consider developing a scenario that would work

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<sup>8</sup> We thank one of our anonymous reviewers for making this point.

effectively even for relatively inexperienced participants, and placing less emphasis on producing a product or presentation.

As with most research, there are limitations and caveats with this research and results. In particular, the small sample size meant that analyses are exploratory in nature and that the results, while statistically significant with a liberal probability value and Cohen's *d* values ranging from .07 to .32, should be treated as preliminary in nature and interpreted with caution. The small number of respondents also precluded other, more fine-grained analyses. For instance, civilian versus military status of the respondent, prior experience in CA complex missions, prior work in other contributing organizations, as well as the impact of the quality of prior interaction with representatives of other groups, all might be expected to affect expectations before and perceptions after an exercise. Also relevant would be to explore the impact of interacting in a more diverse multinational context, where cultural differences might play more of a role in affecting the quality of interaction among participants. Although we were unable to pursue these factors given the limitations of the current data set, they are certainly relevant future areas of research. Finally, the size of the current sample meant that we were not able to conduct any traditional psychometric analyses of the 24 items from the draft QIA scale that were used in the current research. As a result, we elected to treat each item separately rather than combine them into a scale. Although this approach yields useful information, the psychometric refinement of the QIA remains an important question for future research. While the small sample size precluded psychometric assessment of the QIA scale, it did provide information on specific items. For instance, in the future it may be more beneficial to ask respondents to indicate the degree of openness to alternative opinions and perspectives that they expect in order to characterize the interactions with representatives from other organizations, and to assess changes in such interactions—as opposed to having respondents indicate their own openness to the alternative perspectives of others. Future research should also determine the extent to which such training activities and exercises increase specific knowledge and understanding of other organizations contributing to complex missions, the extent to which such knowledge facilitates a comprehensive understanding of how organizations might work together in complex missions, and the extent to which negative stereotypes of other organizations may be diminished. In particular, understanding whether these effects may be long lasting and may survive the stress and ambiguity of actual complex missions is critical as the ultimate test of the value of educational and training activities.

The very positive results seen on many of the QIA items, perhaps especially those associated with the Pre-Exercise survey, may suggest ceiling effects (i.e., where the majority of people tested score in the upper limits of a response scale). Ironically, the impact of ceiling effects on the Pre-Exercise survey can work to mask the positive changes that may result from participation in training such as EX CE 2017. There may also have been the possibility of acquiescence (the tendency to positively respond to any survey statement) or demand characteristics (where respondents may report specific answers because they wish to be 'good research participants' (Nichols & Maner, 2008; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In the present case, the majority of attendees had an interest in participating in the exercise. Moreover, they were aware that the objective of the exercise was to promote collaboration and understanding among agencies that work together in complex missions. As a result, respondents may have given ratings that were more positive than they actually felt, at least in some cases. On the other hand, we tried to minimize the potential effect of these particular biases via the use of (a) unsigned consent procedures, (b) an anonymous PIN number, (c) survey instructions emphasizing candor and that a range of responses were possible, and (d) that the purpose of the survey was to make improvements in future iterations of EX CE.

The results of this report have already directly contributed to developing and adjusting the design of CE 2018. For instance, information exchange is considered to be a crucial component of this activity, and the Pre-Exercise results indicated that participants too expected high levels of information. However, we found that there was a significant decrease in participants' average ratings of the actual information sharing and exchange with members of other organizations in their theme group. Although the Pre- and the Post-Exercise average scores were relatively high for this item, this remains potentially problematic in that one of the main goals of the exercise is to promote greater knowledge and information exchange between members of different organizations. Thus, in 2018, there will be redoubled efforts to find ways to build deeper awareness and knowledge of the participating organizations' competencies and resources—either immediately at the start of the exercise, or even prior to the exercise. It also suggests the need to include the requirement for organizations to share information about each other in order to address the theme group tasks. While this will improve interaction and work during the theme groups, it will also benefit the longer-term goals of interagency activities of this nature: deeper pre-existing knowledge of other organizations that may be in a mission area. Also, the finding that participants indicated that the clarity of tasks and expected results greatly improved during the exercise can actually be interpreted as a weakness in the 2017 exercise design. This finding led to the recommendation to redesign the introduction process and handout information.

## **5 Conclusion**

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The current results suggest that EX CE 2017 fostered communication, engagement, and interaction between civilian and military partners. The results speak to the positive outcomes of such activities for military and civilian partners in complex and comprehensive missions. Although there is a need for continued systematic research in this area, these findings certainly support the continued investment in and refinement of exercises such as EX CE in future years. The results of this report have already directly contributed to developing and adjusting the design of CE 2018.

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# Annex A Overview of Exercise Common Effort 2017 and High-Level Event

*Table A.1: Time table for Exercise Common Effort 2017 and High Level Event.*

	Monday, 29 MAY	Tuesday, 30 MAY	Wednesday, 31 MAY	Thursday, 01 JUNE	Friday, 02 JUNE
A M	Travelling (busses): • The Netherlands  • Muenster	08.30 – 11.00 Plenary introductions	08.30 – 12.00 Comprehensive Assessment Groups	08.30 – 12.00 Plenary simulation of reporting session (six reports of Comprehensive Assessment Groups)	08.30 Hot wash-up  > 09.30 Out processing
		11.00 – 12.00 Formation and familiarization Comprehensive Assessment Groups		11.00 – 12.00 Preparation High level event	
P M	> 14.00 In processing ESTREL Hotel 	13.00 – 17.00 Comprehensive Assessment Groups: 1: 25 participants 2: " 3: " 4: " 5: " 6: "  <b>Exercise participants: maximum 150</b>	13.00 – 15.30 Comprehensive Assessment Groups	<u>High level event</u> BMZ 	
			15.30 – 17.00 Finalization of Comprehensive Assessment Group reports		
E V E N I N G	20.00 – 21.00 Opening CE 17 and Ice breaker	19.00 – 20.30 Keynote presentations "Bundespräsident Wulff"  > 20.30 – 21.30 Networking event	19.00 – 20.30 Keynote presentations "Ambassador Brose (former GERMAN ambassador in Iraq)"  > 20.30 – 21.30 Networking event	19.00 Option to visit Berlin city centre  EXCON: preparation hot wash-up	

## Annex B Exercise Common Effort 2017—Pre-Ex Survey

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DRDC TORONTO RESEARCH CENTRE IS THE HUMAN SCIENCES LABORATORY OF DEFENCE RESEARCH AND DEVELOPMENT CANADA (DRDC), WITHIN CANADA’S DEPARTMENT OF NATIONAL DEFENCE.

<b>Background:</b>	Our research team is investigating how organizations work together in complex comprehensive approach missions. The goal of our work is to document the experiences of the people who work within these contexts to improve education and training for these contexts.
<b>Purposes of this study:</b>	1. To document participants’ perceptions of Exercise Common Effort. 2. To determine whether social network analysis techniques can be used to graphically represent the plans developed by the theme groups.
<b>Instructions:</b>	There will be two surveys distributed over the exercise; each survey should take no more than 15-20 minutes of your time. Please answer the items according to the scales provided.  <u>There are no right or wrong answers to these questions. People may have differing experiences and we are interested in what your experiences are.</u> We appreciate your input and ask that you be as honest as possible so that our information accurately reflects your experience and the things that are important to you.
<b>Your Rights as a Participant</b>	Your participation is completely voluntary and is independent of your participation in Exercise Common Effort. You can skip any questions. You can cease your participation at any time. You may ask questions of the investigators at any time. Your answers are confidential and anonymous.
<b>Protecting Your Identity and Ensuring the Anonymity of your Responses</b>	You will generate a unique identification number to link your surveys to ensure your anonymity. If you provide your contact information at the end of the study, it will be kept separately from your data in a secure location and will be available only to the investigators.  Only authorized researchers will have access to the data and only group results are presented to further protect your anonymity.  The Canadian Government’s Directorate of Access to Information and Privacy (DAIP) is also required to remove any personally identifying information prior to releasing information concerning this research, in the unlikely event of an Access to Information request.
<b>What are the risks of my participation?</b>	The only anticipated risks to you are minor eyestrain and/or boredom.
<b>What are the benefits of my participation?</b>	Your answers will assist to improve future exercises of this nature, as well as add to our understanding of complex comprehensive approach missions more generally.
<b>Ethical Review</b>	This research has been reviewed and approved by the Defence Research and Development Canada’s Human Research Ethics Committee (Research Protocol Number: 2017 – 022).
<b>Who can contact about this study?</b>	<b>Ex Common Effort Organizer:</b> Dr. Peter Essens, <a href="mailto:peter.essens@tno.nl">peter.essens@tno.nl</a> <b>Principal DRDC Investigator:</b> <b>Dr. Megan Thompson, <a href="mailto:Megan.Thompson@drdc-rddc.gc.ca">Megan.Thompson@drdc-rddc.gc.ca</a>;</b> Co-Investigator: <b>Dr. Ritu Gill, <a href="mailto:Ritu.Gill@drdc-rddc.gc.ca">Ritu.Gill@drdc-rddc.gc.ca</a>;</b> <b>Dr. Shadi Ghajar-Khosravi, DRDC – Toronto Research Centre, <a href="mailto:Shadi.Ghajar@drdc-rddc.gc.ca">Shadi.Ghajar@drdc-rddc.gc.ca</a></b> <b>DRDC Human Research Ethics Chair, Tonya Hendriks, <a href="mailto:HREC-CEESH-Toronto@drdc-rddc.gc.ca">HREC-CEESH-Toronto@drdc-rddc.gc.ca</a></b>

PLEASE KEEP THIS SHEET FOR YOUR FUTURE INFORMATION

### Ex Common Effort 2017 - Pre- Exercise Survey Items

**NOTE: YOUR COMPLETION OF THIS QUESTIONNAIRE SERVES AS YOUR UNSIGNED CONSENT TO PARTICIPATE IN THIS STUDY. YOU MAY SKIP ANY QUESTIONS AND YOU MAY END YOUR PARTICIPATION AT ANY TIME.**

**I. Demographics and Background Questions –Your answers to the questions on the next two pages will be combined with everyone else’s to describe the group in general terms.**

<p><u>Please write your personal code</u> </p> <p>We ask you to generate a personal code for anonymously comparing follow-up questionnaires at Common Effort, so that we can learn from your experiences</p>	<p>1<sup>st</sup> 3 letters of mother maiden name: ___ ___ ___</p> <p>1<sup>st</sup> 3 letters of your month of birth ___ ___ ___</p> <p>1<sup>st</sup> 3 letters of town in which you were born ___ ___ ___</p>
--	--

1. Age: 18-29  30-39  40-49  50+

2. Gender (M/F): \_\_\_\_\_ Prefer not to answer

3. I am currently working for:

a government organization                       a non-governmental or international organization                       the military

4. Please indicate if you have previously worked for each of the following (in months) (indicate all that apply to you):

a government organization \_\_\_\_\_  a non-governmental or international organization \_\_\_\_\_  the military \_\_\_\_\_

5. I have previously been involved in a comprehensive approach?:    0            1            2            3+ times

In my previous deployment(s) I have interacted with members of:

	1	2	3	4	5
a) NGOS	Not at all	A Little	To Some Degree	A Great Deal	Extensively
b) Government Agencies	1	2	3	4	5
	Not at all	A Little	To Some Degree	A Great Deal	Extensively
c) Military	1	2	3	4	5
	Not at all	A Little	To Some Degree	A Great Deal	Extensively

6. I have participated in a previous EX COMMON Effort    yes             no

<b>I am familiar with the term the Comprehensive Approach</b>	1 Not at all	2 A Little	3 Somewhat	4 A Great Deal	5 Completely
<b>I define the Comprehensive Approach as:</b>					

<b>In your prior missions, which of the following descriptions best defines the degree of interaction that you had with other civil and military actors in the mission? (select one)</b>					
	Your organization was fully integrated into planning, operational execution, information sharing, situational updates, etc	Your organization sought and received information from wider mission team, and synchronized your plans, activities.	Your organization provided or received information from the wider mission team that influenced own plans.	Your organization was provided information by the wider mission team but was not involved in making plans/decisions/activities	Not informed/ included
	<b>Integrated</b>	<b>Coordinated</b>	<b>Cooperated</b>	<b>Informed</b>	<b>No interaction</b>
<b>Civilian Actors:</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Military Actors:</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**PLEASE ANSWER THE FOLLOWING STATEMENTS IN TERMS OF WHAT YOU EXPECT TO BE THE CASE AS PART OF YOUR EX COMMON EFFORT 2017 EXPERIENCE**

	Strongly Disagree			Strongly Agree			Not Applicable	
	1	2	3	4	5	6	7	NA
In order to achieve my theme group's goals, I will have to exchange information and advice with representatives from other organizations in my theme group.	<input type="checkbox"/>							
I will have to work closely with representatives from other organizations in my theme group to achieve the goals of the theme group.	<input type="checkbox"/>							
I will rarely have a need to check or work with representatives from other organizations in my theme group.	<input type="checkbox"/>							
The objectives and products for my theme group are clear to me.	<input type="checkbox"/>							
The tasks and responsibilities of my theme group are clear to me.	<input type="checkbox"/>							
It is clear how my home organization's objectives relate to the overall objectives of my theme group.	<input type="checkbox"/>							
I expect it will be easy to interact with representatives of the other organizations in my theme group.	<input type="checkbox"/>							
I expect that information sharing between the representatives of different organizations in my theme group will be informal and flexible.	<input type="checkbox"/>							
There will be a high level of information sharing between the representatives of different organizations within my theme group.	<input type="checkbox"/>							
I expect that there will be problems in communication between representatives of different organizations within my theme group.	<input type="checkbox"/>							
I will be able to count on the representatives of other organizations for help, if our theme group has difficulties with our task.	<input type="checkbox"/>							
The representatives of the other organizations in my theme group will be able to provide relevant information to produce good results in my theme group.	<input type="checkbox"/>							
I will be able to rely on the representatives of the other organizations in my theme group to take my interests into account.	<input type="checkbox"/>							

	<b>Strongly Disagree</b>						<b>Strongly Agree</b>		<b>Not Applicable</b>
Within my theme group the importance of each of the following will be emphasized:	1	2	3	4	5	6	7	NA	
a) exchanging information with representatives of the other organizations in the theme group ...	<input type="checkbox"/>								
b) building solid relationships with the representatives of other organizations in the theme group...	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
c) collaborating with representatives of other organizations within the theme group...	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
I expect it will be easy for me to collect all the information I possibly can from the representatives of other organizations in my theme group.	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
My theme group results will include multiple perspectives reflecting relevant contributions of all the organizations in it.	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
I will try hard to understand the perspectives of the representatives from the other organizations in my theme group, even when my views are different from theirs.	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
If conflicting opinions are put forward by the representatives of other organizations in my theme group, I will try to understand the reasoning and thought processes behind them.	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
There are will be no problems in coordinating with representatives of other organizations in my theme group.	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
Miscommunications with representatives of other organizations in my theme group will occur often.	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
Discussions with the representatives of other organizations in my theme group will be constructive.	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								
Issues between the representatives of the different organizations in my theme group always will be discussed and worked out in mutually acceptable decisions.	1	2	3	4	5	6	7	NA	
	<input type="checkbox"/>								

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## Annex C Exercise Common Effort 2017—Post-Ex Survey

Principal Investigator: Dr. Megan Thompson, Defence Research & Development Canada (DRDC) – Toronto Research Centre, [Megan.Thompson@drdc-rddc.gc.ca](mailto:Megan.Thompson@drdc-rddc.gc.ca) Co-investigators: Dr. Ritu Gill, (DRDC) – Toronto Research Centre, [Ritu.Gill@drdc-rddc.gc.ca](mailto:Ritu.Gill@drdc-rddc.gc.ca); Dr. Shadi Ghajar-Khosravi, DRDC – Toronto Research Centre, [Shadi.Ghajar@drdc-rddc.gc.ca](mailto:Shadi.Ghajar@drdc-rddc.gc.ca)

**DRDC TORONTO RESEARCH CENTRE IS THE HUMAN SCIENCES LABORATORY OF DEFENCE RESEARCH AND DEVELOPMENT CANADA (DRDC), WITHIN CANADA’S DEPARTMENT OF NATIONAL DEFENCE.**

<b>Background:</b>	Our research team is investigating how organizations work together in complex comprehensive approach missions. The goal of our work is to document the experiences of the people who work within these contexts to improve education and training for these contexts.
<b>Purposes of this study:</b>	1. To document participants’ perceptions of their experience in Exercise Common Effort 2017
<b>Instructions:</b>	This survey asks about your experience at the end of Ex Common Effort 2017; the survey should take no more than 15-20 minutes of your time. Please answer the items according to the scales provided.  <u>There are no right or wrong answers to these questions. People may have differing experiences and we are interested in what your experiences are. We appreciate your input and ask that you be as honest as possible so that our information accurately reflects your experience and the things that are important to you.</u>
<b>Your Rights as a Participant</b>	1. Your participation is completely voluntary and is independent of your participation in Exercise Common Effort. 2. You can skip any questions. You can cease your participation at any time. 3. You may ask questions of the investigators at any time. 4. Your answers are confidential and anonymous.
<b>Protecting Your Identity and Ensuring the Anonymity of your Responses</b>	The unique identification number you generated to link your surveys ensures your anonymity. If you provide your contact information at the end of the study, it will be kept separately from your data in a secure location and will be available only to the investigators.  Only authorized researchers will have access to the data and only group results are presented to further protect your anonymity.  The Canadian Government’s Directorate of Access to Information and Privacy (DAIP) is also required to remove any personally identifying information prior to releasing information concerning this research, in the unlikely event of an Access to Information request.
<b>What are the risks of my participation?</b>	The only anticipated risks to you are minor eyestrain and/or boredom.
<b>What are the benefits of my participation?</b>	Your answers will assist to improve future exercises of this nature, as well as add to our understanding of complex comprehensive approach missions more generally.
<b>Ethical Review</b>	This research has been reviewed and approved by the Defence Research and Development Canada’s Human Research Ethics Committee (Research Protocol Number: 2017 – 022).
<b>Who can contact about this study?</b>	Ex Common Effort Organizer: Dr. Peter Essens, <a href="mailto:peter.essens@tno.nl">peter.essens@tno.nl</a> Principal DRDC Investigator: Dr. Megan Thompson, <a href="mailto:Megan.Thompson@drdc-rddc.gc.ca">Megan.Thompson@drdc-rddc.gc.ca</a> ; DRDC Human Research Ethics Chair, Tonya Hendriks, <a href="mailto:HREC-CEESH-Toronto@drdc-rddc.gc.ca">HREC-CEESH-Toronto@drdc-rddc.gc.ca</a>

PLEASE KEEP THIS SHEET FOR YOUR FUTURE INFORMATION

### Ex Common Effort 2017 - Post- Exercise Survey Items

**NOTE: YOUR COMPLETION OF THIS QUESTIONNAIRE SERVES AS YOUR UNSIGNED CONSENT TO PARTICIPATE IN THIS STUDY. YOU MAY SKIP ANY QUESTIONS AND YOU MAY END YOUR PARTICIPATION AT ANY TIME.**

<p><u>Please write your personal code</u> ⇨</p> <p>We ask you to generate a personal code for anonymously comparing follow-up questionnaires at Common Effort, so that we can learn from your experiences</p>	<p>1<sup>st</sup> 3 letters of mother maiden name: ___ ___ ___</p> <p>1<sup>st</sup> 3 letters of your month of birth ___ ___ ___</p> <p>1<sup>st</sup> 3 letters of town in which you were born ___ ___ ___</p>
---	--

**I was a Theme group: Facilitator** \_\_\_ **Participant** \_\_\_

**USING THE SCALE PROVIDED, PLEASE ANSWER THE FOLLOWING STATEMENTS IN TERMS OF AS YOU CURRENTLY FEEL ABOUT YOUR EXPERIENCE AT EX COMMON EFFORT THIS WEEK.**

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree	Not Applicable
In order to achieve my theme group's goals, I had to exchange information and advice with representatives from other organizations in my theme group.	1	2	3	4	5	6	7	NA		
	<input type="checkbox"/>									
I had to work closely with representatives from other organizations in my theme group to achieve the goals of the theme group.	1	2	3	4	5	6	7	NA		
	<input type="checkbox"/>									
I rarely needed to check or work with representatives from other organizations in my theme group.	1	2	3	4	5	6	7	NA		
	<input type="checkbox"/>									
The objectives and products for my theme group were clear to me.	1	2	3	4	5	6	7	NA		
	<input type="checkbox"/>									
The tasks and responsibilities of my theme group were clear to me.	1	2	3	4	5	6	7	NA		
	<input type="checkbox"/>									
It was clear how my home organizations objectives relate to the overall objectives of my theme group.	1	2	3	4	5	6	7	NA		
	<input type="checkbox"/>									
It was easy to interact with representatives of the other organizations in my theme group.	1	2	3	4	5	6	7	NA		
	<input type="checkbox"/>									
Information sharing between the representatives of different organizations in my theme group was informal and flexible.	1	2	3	4	5	6	7	NA		
	<input type="checkbox"/>									

	<b>Strongly Disagree</b>				<b>Strongly Agree</b>			<b>Not Applicable</b>
	1	2	3	4	5	6	7	NA
There was a high level of information sharing between the representatives of different organizations within my theme group.	<input type="checkbox"/>							
There were problems in communication between representatives of different organizations within my theme group.	<input type="checkbox"/>							
I was able to count on the representatives of other organizations for help, if our theme group has difficulties with our task.	<input type="checkbox"/>							
The representatives of the other organizations in my theme group were able to provide relevant information to produce good results in my theme group.	<input type="checkbox"/>							
I could rely on the representatives of the other organizations in my theme group to take my interests into account.	<input type="checkbox"/>							
Within my theme group the importance of each of the following was emphasized:								
a) exchanging information with representatives of the other organizations in the theme group ...	<input type="checkbox"/>							
b) building solid relationships with the representatives of other organizations in the theme group...	<input type="checkbox"/>							
c) collaborating with representatives of other organizations within the theme group ...	<input type="checkbox"/>							
It was easy for me to collect all the information I possibly can from the representatives of other organizations in my theme group.	<input type="checkbox"/>							
My theme group results included multiple perspectives reflecting relevant contributions of all the organizations in it.	<input type="checkbox"/>							
I tried hard to understand the perspectives of the representatives from the other organizations in my theme group, even when my views were different from theirs.	<input type="checkbox"/>							

	<b>Strongly Disagree</b>		<b>Strongly Agree</b>		<b>Not Applicable</b>			
If conflicting opinions were put forward by the representatives of other organizations in my theme group, I tried to understand the reasoning and thought processes behind them.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>
There were no problems in coordinating with representatives of other organizations in my theme group.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>
Miscommunications with representatives of other organizations in my theme group occurred often.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>
Discussions with the representatives of other organizations in my theme group were constructive.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>
Issues between the representatives of the different organizations in my theme group always were discussed and worked out in mutually acceptable decisions.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>
I have gained insight into how other organizations function.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>
I have increased my knowledge about the Comprehensive Approach	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>
I have learned about others perceptions of myself or my organization.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>
I have increased my understanding of issues and problems outside my organization	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>	NA <input type="checkbox"/>

Please indicate which of the following descriptions best defines the degree of interaction that you had with representatives of other organizations in your theme group (select one)					
	Your organization was fully integrated into planning, operational execution, information sharing, situational updates, etc	Your organization sought and received information from wider mission team, and synchronized your plans, activities.	Your organization provided or received information from the wider mission team that influenced own plans	Your organization was provided information by the wider mission team but was not involved in making plans/decisions/activities	Not informed/included
	<b>Integrated</b>	<b>Coordinated</b>	<b>Cooperated</b>	<b>Informed</b>	<b>No interaction</b>
<b>Civil Actors</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Military Actors</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



### **Request to Contact for Future Participation**

Would you be willing to be contacted in the future by a member of our research team about your ongoing experiences in the context of a comprehensive approach to operations? This would involve a short follow-up questionnaire sent to you via e-mail.

Your participation in any follow-up is completely voluntary. Indicating your name does not commit you to future participation, only that you are willing to be contacted in the future. You are, of course, free to decline to participate at any point in time.

If you are willing to be contacted, please fill out the information below.

Note this sheet will be kept locked and separate from your data.

Name:

---

Email Address(es):

---

## Annex D QIA Item Frequencies by Response Option and Grouped via Theme

#	THEME/Item		Strongly Disagree	Somewhat Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Somewhat Agree	Strongly Agree
<b>INFORMATION EXCHANGE</b>									
1	Achieving my theme group's goals requires information exchange with representatives of other organizations	Pre	--	--	--	1	4	12	22
		Post	1	--	--	1	8	15	14
2	Need to work closely with reps from other organizations to achieve theme group goals	Pre	--	--	--	1	7	9	23
		Post	--	1	1	2	2	18	14
3	Rarely need to check or work with representatives from other orgs in my theme group (reversal)	Pre	17	13	4	2	--	2	--
		Post	17	13	4	2	--	2	--
8	Info sharing in theme group informal and flexible	Pre	--	--	2	1	5	24	8
		Post	--	--	1	1	3	13	20
9	High level of info sharing between reps of different orgs in my theme group	Pre	--	--	--	4	10	21	4
		Post	--	--	3	4	7	14	11
14	Importance of info sharing emphasized in my theme group	Pre	--	--	--	--	3	22	13
		Post	1	--	--	5	9	14	8
17	Easy to collect info I need from reps of other orgs in my theme group	Pre	--	--	4	7	13	13	2
		Post	--	3	2	2	7	18	6
<b>COLLABORATION</b>									
7	Easy to interact with reps of other organizations in my theme group	Pre	--	--	1	6	10	20	3
		Post	--	--	2	2	5	11	18
15	The importance of building solid relationships emphasized in my theme group	Pre	--	--	3	8	10	10	7
		Post	1	--	5	5	8	10	8
16	The importance of collaborating with reps from other organizations in my theme group emphasized	Pre	--	--	--	1	9	20	7
		Post	1	--	--	3	8	14	7
21	No problems in coordinating with reps of other organizations in my theme group	Pre	2	1	2	8	14	10	2
		Post	1	1	3	1	8	10	14
23	Constructive discussion with representatives of other organizations in my theme group	Pre	--	--	--	--	8	21	10
		Post	--	--	1	3	4	20	10

#	THEME/Item		Strongly Disagree	Somewhat Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Somewhat Agree	Strongly Agree
<b>PERSPECTIVE TAKING</b>									
18	Theme group results include multiple perspectives	Pre	--	1	--	5	8	18	7
		Post	1	--	1	1	8	12	15
19	I try hard to understand the perspectives of representatives from other organizations, even when my views differ	Pre	--	1	1		4	19	14
		Post	--	1	2	1	9	15	11
20	I try hard to understand reasoning even if conflicting opinions are put forward by representatives from other organizations	Pre	--	--	--	1	5	17	15
		Post	--	--	--	5	12	25	19
<b>CONFLICT AND CONFLICT RESOLUTION</b>									
10	Problems in communication between representatives of other organizations in my theme group (reversal)	Pre	2	9	13	5	10	1	--
		Post	10	11	11	3	3	1	--
22	Miscommunications with representatives from other organizations occur often (reversal)	Pre	2	11	12	2	11	1	--
		Post	10	15	6	4	3	--	1
24	Issues between representatives of other organizations in my theme group discussed and worked out in mutually acceptable decisions.	Pre	--	--	1	8	5	17	8
		Post	--	--	1	2	7	18	10
<b>TRUST</b>									
11	Count on representatives of other organizations in my theme group for help regarding difficulties with our tasks	Pre	--	--	2	4	11	15	7
		Post	--	1	3	4	7	12	7
12	Representatives of other organizations in my theme group supply relevant information to produce good results in my theme group	Pre	--	--	--	1	4	25	10
		Post	1	1	2	3	5	15	11
13	Rely on representatives of the other organizations in my theme group to take my interests into account.	Pre	--	1	3	5	7	20	4
		Post	--	2	1	2	6	18	7
<b>CLARITY</b>									
4	Objectives and results of my theme group clear to me	Pre	--	--	3	13	11	6	2
		Post	--	--	2	5	7	15	9
5	Tasks and responsibilities of my theme group clear to me	Pre	1	1	--	12	11	10	1
		Post	--	1	2	3	5	14	4
6	Clear how my home organizations objectives relate to the objectives of my theme group	Pre	--	1	2	6	9	12	6
		Post	--	2	2	3	5	17	10

## Annex E QIA Item Percentages by Response Option and Grouped via Theme

QIA #	THEME/Item		Strongly Disagree	Somewhat Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Somewhat Agree	Strongly Agree	Total % Disagree	Total % Agree
<b>INFORMATION EXCHANGE</b>											
1	Achieving my theme group's goals requires information exchange with representatives of other organization	Pre	0.0%	0.0%	0.0%	2.6%	10.3%	30.8%	56.4%	0.0%	97.4%
		Post	2.6%	0.0%	0.0%	2.6%	20.5%	38.5%	35.9%	2.6%	94.9%
2	Need to work closely with reps from other organizations to achieve theme group goals	Pre	0.0%	0.0%	0.0%	2.5%	17.5%	22.5%	57.5%	0.0%	97.5%
		Post	0.0%	2.6%	2.6%	5.3%	5.3%	47.4%	36.8%	5.3%	89.5%
3	Rarely need to check or work with representatives from other orgs in my theme group (reversal)	Pre	0.0%	5.3%	0.0%	5.3%	10.5%	34.2%	44.7%	5.3%	89.5%
		Post	0.0%	5.3%	0.0%	5.3%	10.5%	34.2%	44.7%	5.3%	89.5%
8	Info sharing in theme group informal and flexible	Pre	0.0%	0.0%	5.0%	2.5%	12.5%	60.0%	20.0%	5.0%	92.5%
		Post	0.0%	0.0%	2.6%	2.6%	7.9%	34.2%	52.6%	2.6%	94.7%
9	High level of info sharing between reps of different orgs in my theme group	Pre	0.0%	0.0%	0.0%	10.3%	25.6%	53.8%	10.3%	0.0%	89.7%
		Post	0.0%	0.0%	7.7%	10.3%	17.9%	35.9%	28.2%	7.7%	82.1%
14	Importance of info sharing emphasized in my theme group	Pre	0.0%	0.0%	0.0%	0.0%	7.9%	57.9%	34.2%	0.0%	100.0%
		Post	2.7%	0.0%	0.0%	13.5%	24.3%	37.8%	21.6%	2.7%	83.8%
17	Easy to collect info I need from reps of other orgs in my theme group	Pre	0.0%	0.0%	10.3%	17.9%	33.3%	33.3%	5.1%	10.3%	71.8%
		Post	0.0%	7.9%	5.3%	5.3%	18.4%	47.4%	15.8%	13.2%	81.6%

QIA #	THEME/item		Strongly Disagree	Somewhat Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Somewhat Agree	Strongly Agree	Total % Disagree	Total % Agree
<b>COLLABORATION</b>											
7	Easy to interact with reps of other organizations in my theme group	Pre	0.0%	0.0%	2.5%	15.0%	25.0%	50.0%	7.5%	2.5%	82.5%
		Post	0.0%	0.0%	5.3%	5.3%	13.2%	28.9%	47.4%	5.3%	89.5%
15	The importance of building solid relationships emphasized in my theme group	Pre	0.0%	0.0%	7.9%	21.1%	26.3%	26.3%	18.4%	7.9%	71.1%
		Post	2.7%	0.0%	13.5%	13.5%	21.6%	27.0%	21.6%	16.2%	70.3%
16	The importance of collaborating with reps from other organizations in my theme group emphasized	Pre	0.0%	0.0%	0.0%	2.7%	24.3%	54.1%	18.9%	0.0%	97.3%
		Post	3.0%	0.0%	0.0%	9.1%	24.2%	42.4%	21.2%	3.0%	87.9%
21	No problems in coordinating with reps of other organizations in my theme group	Pre	5.1%	2.6%	5.1%	20.5%	35.9%	25.6%	5.1%	12.8%	66.7%
		Post	2.6%	2.6%	7.9%	2.6%	21.1%	26.3%	36.8%	13.2%	84.2%
23	Constructive discussion with representatives of other organizations in my theme group	Pre	0.0%	0.0%	0.0%	0.0%	20.5%	53.8%	25.6%	0.0%	100.0%
		Post	0.0%	0.0%	2.6%	7.9%	10.5%	52.6%	26.3%	2.6%	89.5%
<b>PERSPECTIVE TAKING</b>											
18	Theme group results include multiple perspectives	Pre	0.0%	2.6%	0.0%	12.8%	20.5%	46.2%	17.9%	2.6%	84.6%
		Post	2.6%	0.0%	2.6%	2.6%	21.1%	31.6%	39.5%	5.3%	92.1%
19	I try hard to understand the perspectives of representatives from other organizations, even when my views differ	Pre	0.0%	2.6%	2.6%	0.0%	10.3%	48.7%	35.9%	5.1%	94.9%
		Post	0.0%	2.6%	5.1%	2.6%	23.1%	38.5%	28.2%	7.7%	89.7%
20	I try hard to understand the reasoning even if conflicting opinions are put forward by reps of other organization	Pre	0.0%	0.0%	0.0%	2.6%	13.2%	44.7%	39.5%	0.0%	97.4%
		Post	0.0%	0.0%	0.0%	8.2%	19.7%	41.0%	31.1%	0.0%	91.7%

QIA #	THEME/item		Strongly Disagree	Somewhat Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Somewhat Agree	Strongly Agree	Total % Disagree		Total % Agree
<b>CONFLICT AND CONFLICT RESOLUTION</b>												
10	Problems in communication between representatives of other organizations in my theme group (reversal)	Pre	0.0%	2.5%	25.0%	12.5%	32.5%	22.5%	5.0%	27.5%		60.0%
		Post	0.0%	2.6%	7.7%	7.7%	28.2%	28.2%	25.6%	10.3%		82.1%
22	Miscommunications with representatives from other organizations occur often (reversal)	Pre	0.0%	2.6%	28.2%	5.1%	30.8%	28.2%	5.1%	30.8%		64.1%
		Post	2.6%	0.0%	7.7%	10.3%	15.4%	38.5%	25.6%	10.3%		79.5%
24	Issues between representatives of other organizations in my theme group discussed and worked out in mutually acceptable decisions.	Pre	0.0%	0.0%	2.6%	20.5%	12.8%	43.6%	20.5%	2.6%		76.9%
		Post	0.0%	0.0%	2.6%	5.3%	18.4%	47.4%	26.3%	2.6%		92.1%
<b>TRUST</b>												
11	Count on representatives of other organizations in my theme group for help regarding difficulties with our tasks	Pre	0.0%	0.0%	5.1%	10.3%	28.2%	38.5%	17.9%	5.1%		84.6%
		Post	0.0%	2.9%	8.8%	11.8%	20.6%	35.3%	20.6%	11.8%		76.5%
12	Representatives of other organizations in my theme group supply relevant information to produce good results in my theme group	Pre	0.0%	0.0%	0.0%	2.5%	10.0%	62.5%	25.0%	0.0%		97.5%
		Post	2.6%	2.6%	5.3%	7.9%	13.2%	39.5%	28.9%	10.5%		81.6%
13	Rely on representatives of the other organizations in my theme group to take my interests into account.	Pre	0.0%	2.5%	7.5%	12.5%	17.5%	50.0%	10.0%	10.0%		77.5%
		Post	0.0%	5.6%	2.8%	5.6%	16.7%	50.0%	19.4%	8.3%		86.1%

QIA #	THEME/item		Strongly Disagree	Somewhat Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Somewhat Agree	Strongly Agree	Total % Disagree		Total % Agree
<b>CLARITY</b>												
4	Objectives and results of my theme group clear to me	Pre	0.0%	0.0%	8.6%	37.1%	31.4%	17.1%	5.7%	8.6%		54.3%
		Post	0.0%	0.0%	5.3%	13.2%	18.4%	39.5%	23.7%	5.3%		81.6%
5	Tasks and responsibilities of my theme group clear to me	Pre	2.8%	2.8%	0.0%	33.3%	30.6%	27.8%	2.8%	5.6%		61.1%
		Post	0.0%	3.4%	6.9%	10.3%	17.2%	48.3%	13.8%	10.3%		79.3%
6	Clear how my home organizations objectives relate to the objectives of my theme group	Pre	0.0%	2.8%	5.6%	16.7%	25.0%	33.3%	16.7%	8.3%		75.0%
		Post	0.0%	5.1%	5.1%	7.7%	12.8%	43.6%	25.6%	10.3%		82.1%

## List of Symbols/Abbreviations/Acronyms/Initialisms

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1GNC	First German Netherlands Corps
CA	Comprehensive Approach
<i>df</i>	Degrees of Freedom
DRDC	Defence Research and Development Canada
EX CE 2017	Exercise Common Effort 2017
IO	International Organization
<i>M</i>	Mean (or average) Score
NATO RTG 227	North Atlantic Treaty Organization Research and Technology Group
NGO	Non-Governmental Organization
n.s.	not significant
OCHA	Office of Coordination of Humanitarian Affairs
<i>p</i>	Probability Value
PIN	Personal Identification Number
QIA	Quality of Interaction Assessment
<i>SD</i>	Standard Deviation
<i>t</i>	t-value
TRC	Toronto Research Centre
TNO	Netherlands Organization for Scientific Research

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Opportunities for inclusive, interagency interaction, such as education and training, are considered an important way to ensure better coordination within comprehensive missions. Still, there have been few systematic assessments of such activities. In the current research 41 members of German and Dutch governmental and non-governmental organizations and military provided their expectations concerning the quality of interaction, as well as their experience with members of different organizations during Exercise Common Effort 2017 (EX CE 2017), a 3-day scenario-based interorganizational and multinational exercise focusing on interorganizational interaction processes. Organized by the First German/Netherlands Corps (1GNC) together with the Dutch Ministry of Foreign Affairs and the Dutch Ministry of Security and Justice, the event reaches out to also include a broad representation of international and non-governmental organizations. Results indicated that all participants expected the quality of interactions between representatives of the different organizations in their theme groups to be very positive prior to the commencement of the exercise, and perceptions remained high at the end of the exercise. Specifically, ratings of information exchange, collaboration, clarity, and conflict resolution increased after the exercise, although the need for information exchange and the extent to which members of other organizations provided valuable information significantly decreased across the exercise. The findings provide valuable information on what aspects of EX CE 2017 worked well and what could be improved to increase the effectiveness of the exercise.

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Les possibilités d'interactions interagences inclusives, telles que l'éducation et la formation, sont considérées comme un moyen important d'assurer une meilleure coordination dans le cadre de missions générales. Toutefois, on a procédé à peu d'évaluations systématiques de telles activités. Dans le cadre de la présente recherche, 41 militaires et membres d'organisations gouvernementales et non gouvernementales d'Allemagne et des Pays-Bas ont fait part de leurs attentes quant à la qualité des interactions, ainsi que de leur expérience auprès des membres de différentes organisations lors de l'exercice COMMON EFFORT 2017 (Ex CE 2017), un exercice interorganisationnel multinational de trois jours fondé sur un scénario et axé sur les processus d'interaction entre les organisations. Organisé par le 1<sup>er</sup> Corps germano-néerlandais (1GNC) et le ministère de la Sécurité et de la Justice des Pays-Bas, l'événement s'adressait également à un vaste éventail d'organisations internationales et non gouvernementales. Les résultats ont révélé qu'avant le début de l'exercice, tous les participants s'attendaient à une très bonne qualité des interactions entre les représentants des diverses organisations au sein de leurs groupes thématiques, une impression qui était toujours positive à la fin de l'exercice. En particulier, les cotes attribuées aux échanges d'information, à la collaboration, à la clarté et à la résolution de conflits étaient plus élevées après l'exercice, même si la nécessité d'échanger de l'information et la mesure dans laquelle les membres d'autres organisations fournissaient de précieux renseignements avaient diminué considérablement au cours de l'exercice. Les constatations de l'étude fournissent de précieuses données sur les aspects de l'Ex CE 2017 qui ont bien fonctionné et sur ceux qui pourraient être améliorés afin d'accroître son efficacité.

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interagency exercise; comprehensive approach; quality of interaction