

University of Groningen

## Cultural Interoperability in Project Taurus

Wermser, Frederik; Essens, Peter; Täuber, Susanne; Molleman, Eric

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Publication date:*  
2020

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Wermser, F., Essens, P., Täuber, S., & Molleman, E. (2020). *Cultural Interoperability in Project Taurus*.

### Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

### Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

**FINAL REPORT**  
**CULTURAL INTEROPERABILITY IN PROJECT TAURUS**

*University of Groningen*

Frederik Wermser

Dr. Peter Essens

Dr. Susanne Täuber

Prof. Dr. Eric Molleman

**Corresponding author:**

Frederik Wermser, University of Groningen, Nettelbosje 2, 9747 AE Groningen, The Netherlands

Email: [f.l.wermser@rug.nl](mailto:f.l.wermser@rug.nl)

# Final Report

## Cultural Interoperability in Project Taurus

### Executive Summary

To support the process of integration of Netherlands (NLD) and German (DEU) units in the DEU 1. Panzerdivision ("Project Taurus"), the Commando Landstrijdkrachten of the Netherlands and the Kommando Heer of Germany asked the University of Groningen to study the development of identity and culture in these units.

A large-scale survey with three waves was executed by the university in 2017, 2018 and 2019 among soldiers in the staffs of the 1. Panzerdivision, Panzerlehrbrigade 9 and 43 Mechanised Brigade, as well as the entire Panzerbataillon 414 and 45 Armoured Infantry Battalion. In addition, the present findings draw on interviews conducted prior to and after the survey waves.

The level of integration is a prominent factor in how soldiers perceive the integration. This relates to how many soldiers of the other nation operate in a unit, and consequently to the frequency of contact between soldiers of the two nations. Units with 10% or more soldiers of the other nation we call 'Deeply Integrated'. Units with less soldiers of the other nation but still a binational command relationship, are called 'Structurally Integrated'.

1. Motivation matters when working together. Deeply and Structurally Integrated soldiers report high levels of motivation to collaborate, which remains high over the years. Soldiers who perceive the integration as an opportunity from a military perspective and for their individual development, are more motivated to collaborate, identify more strongly with the integrated division and evaluate the integration more positively. Even when motivation is relatively high, stimulation of motivation needs to be actively continued. Using narratives about the necessity and uniqueness of the integration, and the opportunities it may provide at all levels, has shown to be effective.
2. Perceived effectivity and extra effort when working together indicate how smoothly daily collaboration goes. Perceived effectivity is above medium for the DEU soldiers, but lower for the NLD soldiers. Extra effort is relatively low for the DEU soldiers, but higher for the NLD soldiers, in particular in the Deeply Integrated NLD units (sources of extra effort are, for example, working in a non-native language and differences in procedures). Negative perceptions about effectivity and extra effort are related to reduced motivation and overcoming their sources may require extra support.
3. Trust, referring to perceptions of the other nation's soldiers as capable, integer and having good intentions, relates strongly to feelings of belonging to a common group. Trust is medium to high but relatively spread-out between the different units, as is the feeling as a common group. Organizing more face-to-face contact will increase motivation, effectivity, trust and identification. Strengthening the utilization of soldiers' complementary capabilities can contribute to this.
4. Soldiers are generally positive about their contact with soldiers of the other nation and recognize the fit of the NLD and DEU army. Professionalism/competence, motivation and socialness are seen as similarities, whereas NLD soldiers' flexible and DEU soldiers' robust way of working are regarded as the main difference. Positively seen as complementary, this difference can also be a source of friction. In managing NLD-DEU fit, both similarities and differences should be given attention, as similarities can promote effectivity and trust, and complementary differences can give meaning to the integration.
5. Taken together, the development of cultural interoperability, with aspects mentioned above, has been positive. Some specific points have been identified that require attention and possibly action to sustain this development. To support the planning of future integrations, leading questions were formulated based on the findings and insights in this study.

## Table of Contents

1	Introduction .....	3
2	What has been studied? .....	4
3	How was the study organised? .....	5
4	Evidence-based insights .....	7
4.1	Levels of cultural interoperability – motivation, effectivity, effort .....	8
4.1.1	Motivation.....	8
4.1.2	Perceived effectivity.....	9
4.1.3	Extra effort .....	9
4.2	Soldiers’ attitudes regarding the integration and soldiers of the other nation.....	11
4.2.1	Evaluation of the creation of the integrated division .....	11
4.2.2	Evaluation of change caused by the integration.....	12
4.2.3	Trust in soldiers of the other nation .....	12
4.2.4	Common identification and identification with the integrated division .....	14
4.3	Soldiers’ support of the motives of integration.....	16
4.3.1	Opportunities from a military and individual perspective.....	16
4.3.2	Recognition of and pride in the lighthouse project (only Panzerbataillon 414).....	17
4.4	Soldiers’ recognition of the fit of the Netherlands and German army .....	19
4.4.1	Effects of contact prior to the integration .....	19
4.4.2	Evaluation of contact with soldiers of the other nation .....	19
4.4.3	Perceived similarity.....	20
4.4.4	Self- and other-description of German and Netherlands soldiers.....	21
4.5	Frequency of contact with soldiers of the other nation .....	24
4.6	Synergy: The utilization of complementary knowledge and skills.....	27
4.7	Soldiers’ suggestions for improving German-Netherlands collaboration .....	28
5	Conclusions and recommendations.....	29
6	Exploratory questions when planning future integrations.....	31
7	References .....	34

# 1 Introduction

Strengthening military cooperation between member states of the European Union is a political given. The Netherlands and Germany form a spearhead in this process by placing military units at multiple levels (i.e., brigades, battalions) under the command of higher-order units of the respective other nation (i.e., divisions, brigades). In 2016, the Netherlands 43 Mechanised Brigade was placed under the command of the German 1. Panzerdivision, and the German Panzerbataillon 414 was placed under the command of the 43 Mechanised Brigade. Panzerbataillon 414 was reactivated for this purpose and to a third is staffed with Netherlands soldiers. This initiated the creation of an integrated division with military personnel (further labelled “soldiers”) from Germany and the Netherlands to be fully operational in 2021 (“Project Taurus”). This process of integration involves learning to work together and integrating different cultures and ways of working.

Researchers and decision-makers emphasize that (military) integration is a long-term process for which the costs come before the benefits (Bekkers et al., 2012; Hennis-Plasschaert, 2013). Besides the harmonization of equipment, doctrines, regulations, and training, integration also requires a sufficient level of harmonization of identities and culture to be able to operate as a whole. Integrations are likely to disrupt employees’ social environment and activities at work, and bear the risk of tensions between the integrating parties (Giessner, 2011).

To address the potential challenges that revolve around soldiers’ identities and cultural differences, the University of Groningen has been (t)asked by the Commando Landstrijdkrachten of the Netherlands and the Kommando Heer of Germany to support the integration by providing evidence-based insights and recommendations to facilitate successful integration. The focus is on *cultural interoperability*, which is defined as

“the ability and motivation of Netherlands and German soldiers to work together, to bridge differences in thinking and doing, in (implicit) rules and routines - effectively and with minimal extra effort.”

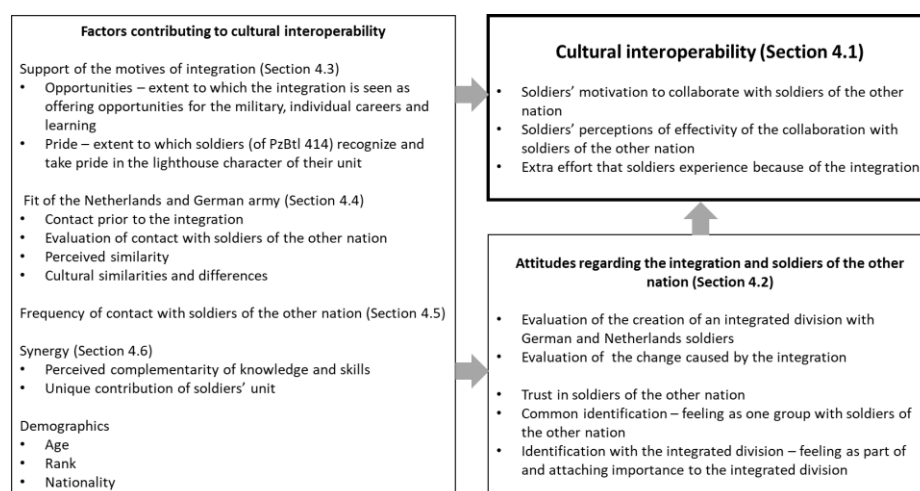
In this report, we describe what has been studied to capture cultural interoperability (Section 2), how this was organised (Section 3), what evidence-based insights were obtained (Section 4), and what actionable recommendations follow from these insights (Section 5). The study was also intended to provide a framework, based on the insights and recommendations, that can be used for future integrations (Section 6). This report is meant for practitioners and decision-makers in the military domain, with a detailed account of the data that underlie the insights and recommendations. An academic elaboration of the study (i.e. dissertation) is under preparation.

## 2 What has been studied?

In this section, we provide a schematic overview of the constructs that were used to get insight into cultural interoperability in the context of Project Taurus. The constructs capture relevant psychological factors such as perceptions, experiences and attitudes of soldiers.

How people perceive their work environment and activities, the experiences they make at work, and their attitudes towards these, greatly shapes their work behaviours and decision making. To study an abstract concept such as cultural interoperability, we had to break this concept down into more detailed constructs (i.e. motivation, perceived effectivity, extra effort). These detailed constructs can - based on the research literature - be related to the perceptions, experiences, and attitudes, thus indicating psychological factors that can contribute to cultural interoperability.

By using scales with multiple items that reflect concrete situations that soldiers (may) have experienced, a rich representation of the different aspects of cultural interoperability, factors contributing to it, and general trends in this were obtained. This allows for insights and recommendations on the development of cultural interoperability. Most of the scales used are based on scientifically established scales that were adapted to fit the present context including the broad range of educational backgrounds of participants. References to the original scales are provided. Other scales were newly developed for the purpose of the present study. A list with all items in German and Dutch can be found in Appendix A. Examples of the full questionnaire are included in the supplemental materials.



*Figure 1 - Theoretical model of all constructs used to assess psychological, contextual and demographic factors contributing to and influencing cultural interoperability.*

Figure 1 provides a schematic overview of all constructs that were used to assess psychological, contextual, and demographic factors that were used for the findings of this study (see Section 4). The demographic factors are objective data not influenced by any of the other factors and are included in analyses to control for their potential influence (i.e. control variables). Contextual factors are representations of factual circumstances such as prior contact and frequency of contact with soldiers of the other nation.

The factors can be grouped into indicators of cultural interoperability, attitudes regarding the integration and soldiers of the other nation, and factors that contribute to individual differences in levels of the indicators and attitudes. Given the correlational nature of this study, the distinction and order of indicators, attitudes and contributing factors is theory-driven.

### 3 How was the study organised?

The findings of the present study are based on a large-scale survey with three waves executed by the University of Groningen in 2017, 2018 and 2019 among soldiers in the staffs of the 1. Panzerdivision, Panzerlehrbrigade 9 and 43 Mechanised Brigade, as well as the entire Panzerbataillon 414 and 45 Armoured Infantry Battalion (further labelled “units”). At the first survey wave 769 soldiers completed a questionnaire. At the second wave 759 questionnaires were completed and at the third wave 712. The respective response rates are 57%, 53% and 44%<sup>1</sup>. In addition to the survey data, the present findings draw on interviews conducted prior to and after the survey waves.

After each survey wave, the findings were communicated to the DEU-NLD Army Steering Group and the commanders of the participating units in the form of written reports (i.e. First Impression Report, Interim Report) and presentations. In a number of instances, the findings were also presented to larger audiences within the participating units. Presentations for audiences beyond the participating units included a keynote at a leadership seminar for the top of the German and Netherlands army, a brief for the DEU-NLD Higher Level Steering Group and, in November 2020, a Symposium for a broader non-military public.

Three features of the present study, in combination, make it a unique project: First the set-up of the study is truly bi-national, as the study was commonly commissioned by the German “Kommando Heer” and the Netherlands “Kommando Landstrijdkrachten”. This bi-nationality ensured access to participants from both armies and fostered bi-national support for the study. Second, the involvement of the University of Groningen as an independent actor. The university’s research team could take a neutral outsider perspective and transfer scientific knowledge from other contexts. Third, the long timespan of three years covered by the study. Together these three features allowed for an evidence-based, comprehensive understanding of cultural interoperability that reflects the experiences of soldiers from both nations at various times and positions within the integration.

#### **Limitations of the study**

A study in practice, of an organisation in change with multiple parties, encounters many challenges some resulting in potential limitations of the study in terms of generalisation. Two of the challenges, and how we addressed them, are discussed here.

*Longitudinal analysis.* The analyses in this report primarily focus on the samples from 2017, 2018 and 2019 in separation. Two factors of the military context limited the number of participants that could be followed over time: First, the personnel rotation of soldiers (i.e. soldiers are placed on another function every two to three years). This resulted in a substantial turnover in the study population and thus structural attrition of the longitudinal sample. Second, because of data safety requirements and privacy regulations, participants’ questionnaires from the different survey waves could not be coupled using their personnel identification. Instead, participants were asked to generate an identification code following a procedure. Results show that this procedure was not always followed correctly. Together, these factors reduced the number of participants for whom questionnaires could be

---

<sup>1</sup> Changes in the response rate are related to three factors. First, the numbers of soldiers per unit reported. These numbers varied over the years. Second, the numbers of soldiers actually available to complete the questionnaires. These were influenced by the numbers of soldiers who were not approachable because of trainings, exercises, and missions. Third, soldiers’ motivation to make the effort to complete the questionnaire. The response rates reported here are conservative because they are based on the numbers of soldiers reported per unit, independent of their availability. Nevertheless, it seems likely that soldiers’ motivation to participate in the survey the first time was higher than repetitively participating the second and third time. An inspection of the demographics does not reveal any structural difference between soldiers who did and did not participate repetitively.

coupled over the successive survey waves. However, the data reported here show that findings were relatively stable over time, with deviations that will be discussed where these show up.

*Representativeness of the data.* The samples we collected in 2017, 2018 and 2019 are overall representative in terms of rank and age. Thus, the way rank and age are distributed in the samples, is similar to how rank and age are distributed in the actual units. However, in a number of cases the samples deviate from the population in the units more than 5%<sup>2</sup>. Notable deviations are an overrepresentation of higher ranks in the sample of the German staffs (i.e. Staff 1. Panzerdivision, Staff Panzerlehrbrigade 9) and of the enlisted ranks in the sample of the 45 Armoured Infantry Battalion. To inspect whether the deviations influence the findings of the present study, we calculated weighted averages. This entails that, when calculating the average, some cases count more (when they are underrepresented in the sample) and others less (when being overrepresented in the sample) to correct for deviations. Using weighted averages did not change the overall pattern of results, however, it can potentially introduce unknown biases by overemphasising specific cases. Therefore, in the following we report the original unweighted averages.

### **Remarks regarding figures and statistical analyses in the report**

A number of figures in this report are presented with ‘low’, ‘medium’ and ‘high’ as anchors of the used scales. These anchors were chosen to enhance the readability of these figures. In the questionnaire, soldiers were presented with statements regarding the psychological construct under investigation and had to indicate whether these statements were, from their personal perspective, ‘inaccurate’, ‘somewhat inaccurate’, ‘partly’, ‘somewhat accurate’, ‘accurate’. Soldiers’ answers regarding the statements were subsequently aggregated. As the aggregated scores no longer directly related to the statements but the constructs they measure, a new, more meaningful scale was assigned.

In this report in Section 4.1, 4.2 and 4.4, we report changes of average levels from 2017 to 2019 of 5% or more as de- respectively increase. However, given the variation in sizes of the groups for which we compare the average levels (i.e. clusters) and variation in the spread of answers within the groups, these de- or increases are not always statistically significant. Statistically significant de- or increases (i.e.  $p < .05$ ) are marked with a “\*” behind the reported percentage.

When testing the relations noted in this report, we included demographics (i.e. age, rank, nationality), frequency of contact with soldiers of the other nation and the clusters (see Section 4) as control variables. Relations are only reported if they remain significant even when the control variables are included.

---

<sup>2</sup> A table giving an overview of the representativeness and deviations can be made available to parties associated with the German or Netherlands army upon request. Please address requests to the corresponding author.



## 4 Evidence-based insights

The findings of the study are presented under the following themes, showing detailed data and graphs. The seven themes are:

1. Levels of cultural interoperability – motivation, effectivity, effort
2. Soldiers' attitudes regarding the integration and soldiers of the other nation
3. Soldiers' support of the motives of integration
4. Soldiers' recognition of the fit of the Netherlands and German army
5. Frequency of contact with soldiers of the other nation
6. Synergy: The utilization of complementary knowledge and skills
7. Soldiers' suggestions for improving German-Netherlands collaboration

The data shown in the graphs below are clustered along the level of integration of the soldiers rather than separately for staffs of the 1. Panzerdivision, Panzerlehrbrigade 9 and 43 Mechanised Brigade, the Panzerbataillon 414 and 45 Armoured Infantry Battalion. The level of integration has shown to be the most prominent factor that allows to organise and present the data in a clear and consistent way. The following clusters are distinguished:

- **Deeply Integrated** - The first two clusters are the deeply integrated German (i.e. DEU Deeply Integrated) and Netherlands (i.e. NLD Deeply Integrated) soldiers. The definition of deep integration is that, from the perspective of the soldier, 10% or more of the soldiers in a division staff, brigade staff or battalion are from the other nation.
- **Structurally Integrated** - The next two clusters are the structurally integrated German (i.e. DEU Structurally Integrated) and Netherlands (i.e. NLD Structurally Integrated) soldiers. Here, the definition of structural integration is that there are soldiers of the other nation in a division staff, brigade staff or battalion and that the respective staff or battalion has command over or is under command of a unit of the other nation.
- **Integration Related** - The last cluster covers the integration related German and Netherlands soldiers. The definition of integration related is that soldiers' brigade staff or battalion has ties with units of the other nation but there are no soldiers of the other nation in the staff or unit and there is no direct and structural command line involving units of another nation.

## 4.1 Levels of cultural interoperability – motivation, effectivity, effort

In this section, we present an overview of the levels and development of cultural interoperability within Project Taurus for the period covered by the present study (2017-2019). In the subsequent sections (4.2 - 4.7), we outline the factors that influence levels of cultural interoperability.

In line with the definition of cultural interoperability given before, we assessed soldiers' motivation to collaborate, their perceptions of how effective this collaboration is, and how much extra effort it causes for them. Soldiers' ability to integrate was captured indirectly, through the measures of effectivity and extra effort. With self-reports, individuals have been found to be inaccurate at estimating their own abilities.

In the following, we present three graphs that show the average levels of the three indicators of cultural interoperability - *motivation*, *effectivity*, and *extra effort*. The average levels are shown separately for the five clusters explained above and for the three points of measurement (i.e. 2017, 2018 and 2019).

### 4.1.1 Motivation

The graph below shows soldiers' motivation to collaborate with soldiers of the other nation. Thus, it summarizes the importance that soldiers attach to making the collaboration work, the investments they are willing to make in order to make the integration a success and to support soldiers of the other nation (e.g. Melkonian et al., 2011). Soldiers' motivation at work is particularly important in the context of integrations because here work-to-rule is not sufficient to achieve the desired outcomes.

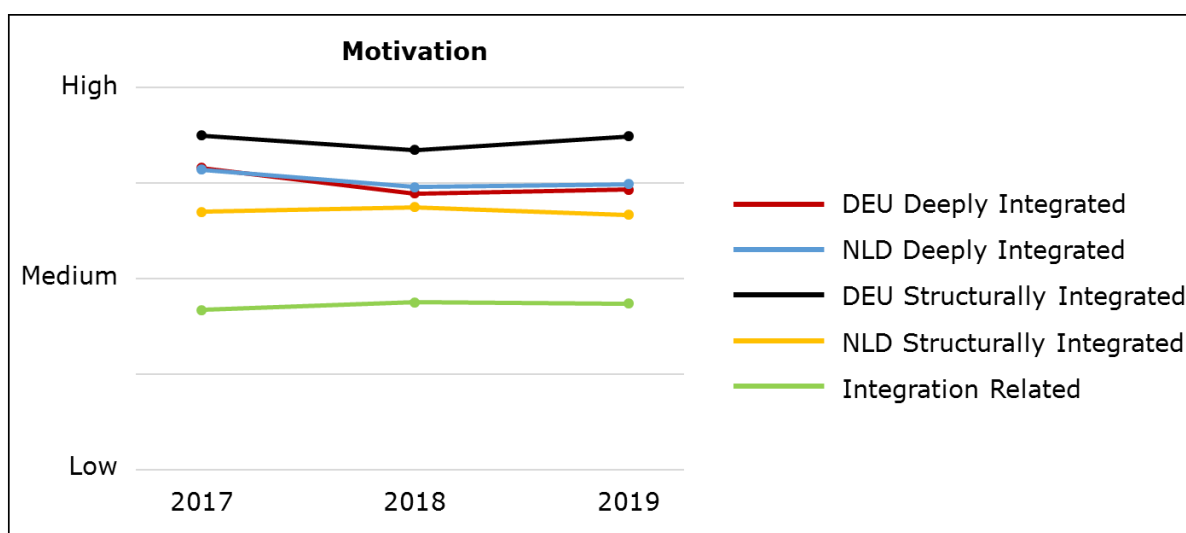


Figure 2 – Average levels of motivation per cluster and year

Deeply and Structurally Integrated soldiers report high levels of motivation to collaborate. For all three years, differences between the clusters of Deeply and Structurally Integrated soldiers are relatively small (maximum difference 20%); of these clusters the DEU Structurally Integrated soldiers persistently are scoring highest and the NLD Deeply Integrated soldiers persistently are scoring lowest relative to the other clusters. The motivation of the Integration Related soldiers is lower than that of the other soldiers (ca. 25% lower than the lowest other cluster). One cluster, the DEU Deeply Integrated soldiers, shows a 6%\* decrease of motivation from 2017 to 2019.

Taken together, these findings suggest that integrated soldiers of both armies are motivated to collaborate. This motivation is lower for soldiers who are only Integration Related. There are no major changes in motivation over time.

### 4.1.2 Perceived effectivity

The graph below shows how soldiers perceive the effectivity of their collaboration with soldiers of the other nation. This relates to questions such as (Richter et al., 2005): Can they work together productively with soldiers of the other nation? When working together are they able to effectively deal with everyday tasks but also unexpected challenges? This perceived effectivity indirectly relates to soldiers' ability to collaborate, because collaboration can only be effective if soldiers are sufficiently culturally capable to make the collaboration work.

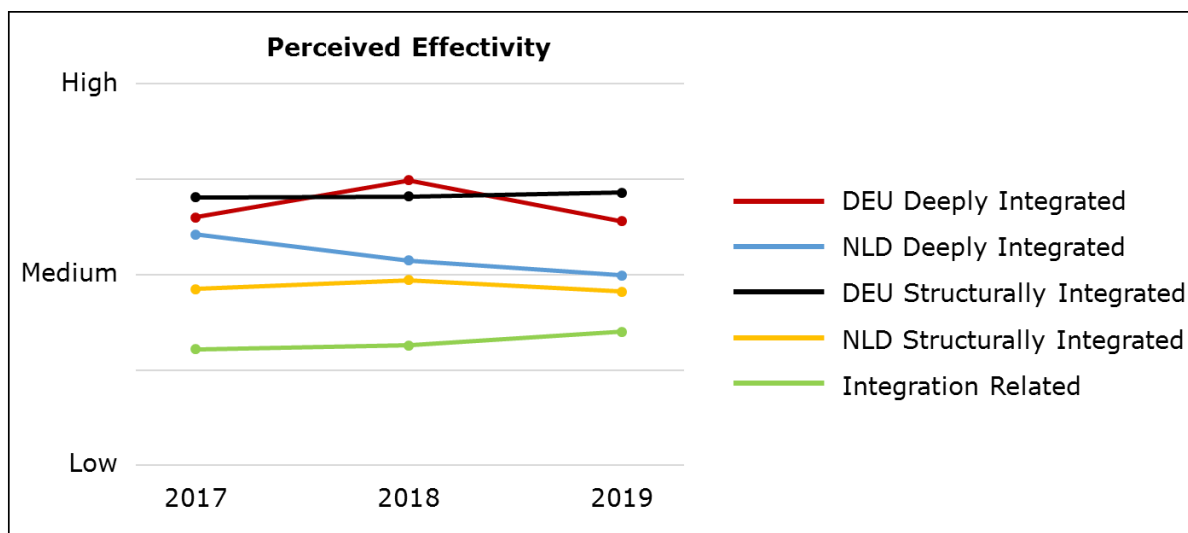


Figure 3 – Average levels of perceived effectivity per cluster and year

Compared to the other indicators of interoperability and the evaluations (see 4.2), levels of effectivity are somewhat lower (ranging around the mid-point). In addition, the difference between the clusters are relatively larger (maximum 26% excluding the Integration Related cluster and 39% including this cluster) than differences between clusters for the other indicators. Many Integration Related soldiers had not yet worked with soldiers of the other nation. Therefore, the levels of effectivity these soldiers report represent expectations rather than personal perceptions.

In the surveys in 2018 and 2019, a division between the DEU and NLD Deeply and Structurally Integrated soldiers becomes visible, with the German soldiers perceiving relatively higher levels of effectivity. From 2017 to 2019 perceived effectivity decreases by 11% for the NLD Deeply Integrated soldiers.

In sum, these findings suggest medium levels of perceived effectivity when working with soldiers of the other nation. It occurs that Netherlands soldiers perceived the collaboration as somewhat less effective – especially as the integration progressed.

### 4.1.3 Extra effort

The graph below indicates the extra effort that soldiers, in their perception, have to invest because of the integration. Thus, it summarizes whether soldiers perceive that working with soldiers of the other nation requires extra time and work investments, is more difficult, and differences of opinions are more prevalent. Studies indicate that integrations often cause extra effort (Essens & Bekkers, 2014). Note that the interpretation of this graph differs from the other graphs as here an increase is a negative development (i.e. soldiers have to invest more extra effort).

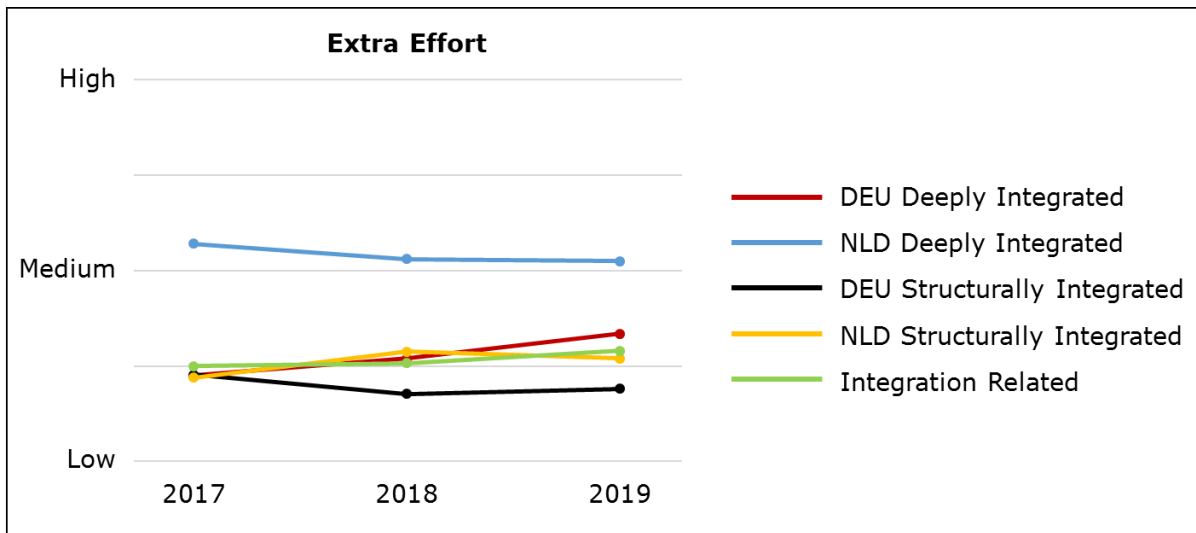


Figure 4 – Average levels of extra effort per cluster and year

The soldiers in most clusters report that they only experience low levels of extra effort caused by the integration. However, the NLD Deeply Integrated soldiers report relatively higher levels of extra effort (in 2017 32%, and in 2019 19% higher than the highest other cluster). These higher levels can, in part, be explained by the stronger changes in the work environment and activities that these soldiers experience.

From 2017 to 2019, soldiers in the DEU Deeply Integrated (10%\*) and NLD Structurally Integrated clusters (5%) report an increase in extra effort. At an individual level, an influential predictor of increases of perceived extra effort is the extent to which soldiers are being increasingly exposed to changes because of the integration. However, according to our data, the clusters with increasing extra effort do not have increasing average levels of perceived change over time. The percentage of variance in extra effort explained by factors captured in our surveys is limited, suggesting that other factors are at play. From the interviews and open questions in our surveys, we deduct that sources of extra effort are among others: communication in a non-native language, differences in procedures, regulations and technical equipment, receiving commands from two command lines, and representative obligations (also see 4.7).

In sum, the data suggest that extra effort is overall low, however, with one exception: NLD Deeply Integrated soldiers experience relatively more extra effort. Changes in the reported levels of extra effort over time can only in part be explained by the numeric factors captured in this study. Interviews and open questions provide information about other factors that likely are at play.

## 4.2 Soldiers' attitudes regarding the integration and soldiers of the other nation

In this section, we present an overview of how soldiers evaluate the integration and the changes it brings about. Moreover, we inspect to what extent German and Netherlands soldiers trust each other and feel as belonging to one group (i.e. identification). Together this information gives an indication of how soldiers think and feel about the integration and the soldiers of the other nation.

### 4.2.1 Evaluation of the creation of the integrated division

The graph below shows soldiers' answers to the question "How do you evaluate the creation of an integrated division with German and Netherlands soldiers?". The aim of this question was to capture whether soldiers overall think positively about Project Taurus and its desired end state.

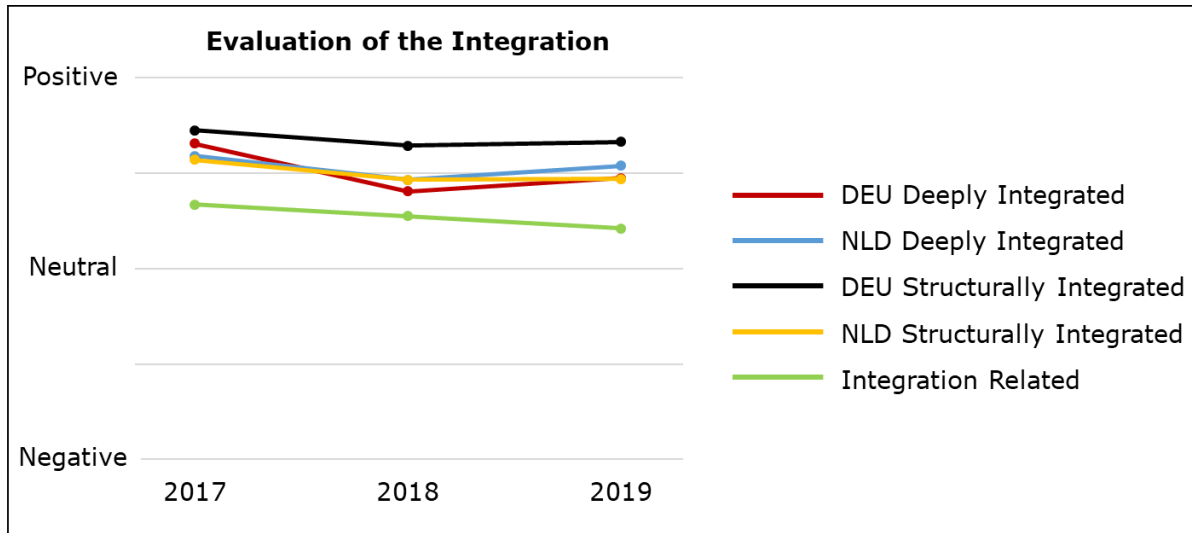


Figure 5 – Average levels of soldiers' evaluation of the creation of the integrated division per cluster and year

Deeply and Structurally Integrated soldiers are on average positive about the creation of the integrated division. Differences between these clusters are small (maximum 11%). The evaluation reported by the Integration Related soldiers is somewhat lower, yet still indicates positivity.

For three clusters we see a decrease in how positively they evaluate the creation of the integrated division. These are the DEU Deeply Integrated (-9%\*) and NLD Structurally Integrated (-5%) as well as the Integration Related soldiers (-6%\*).

An inspection of factors that relate to soldiers' positive evaluations points at seeing opportunities from a military perspective, perceived complementarity, pride in the lighthouse character, and positively evaluated contact as influential factors. Combined, the first three factors highlight the importance of soldiers understanding and supporting the motives of the integration.

Taken together, these findings indicate that soldiers are positive towards Project Taurus and its desired end state. This is related to understanding why the integration takes place and good relations with soldiers of the other nation. However, for part of the soldiers, we see that their evaluations become less positive.

#### 4.2.2 Evaluation of change caused by the integration

The graph below shows soldiers' responses when asked to indicate how they evaluate changes in their direct work environment and the work activities they execute. This gives an impression of how soldiers experience the impact of the integration in their personal everyday working lives.

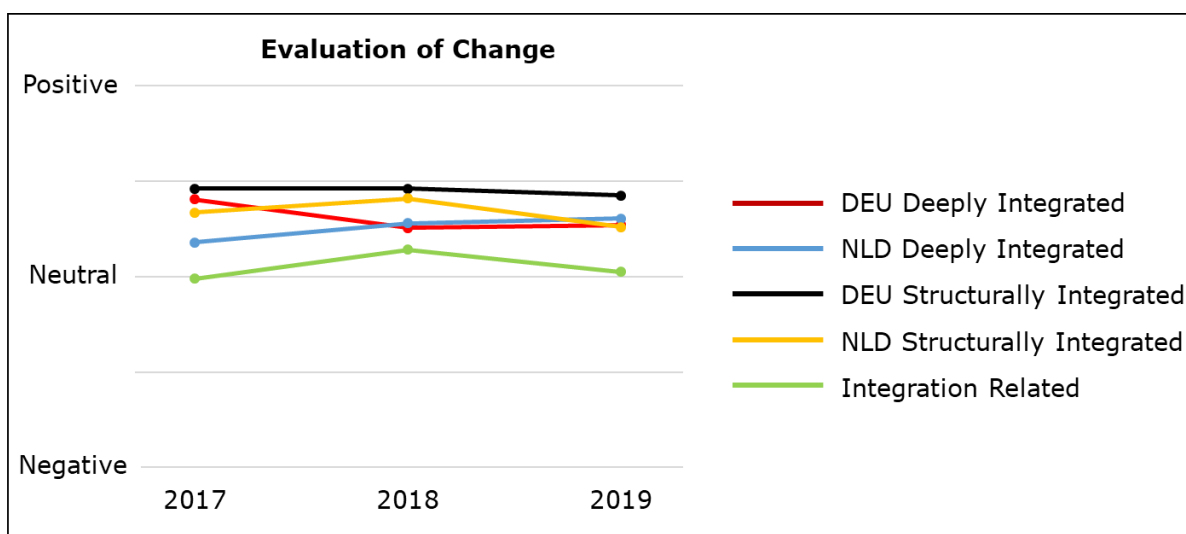


Figure 6 – Average levels of soldiers' evaluation of change per cluster and year

Soldiers are overall relatively positive about the changes the integration causes in their work environment and activities. Differences between the clusters are relatively small (maximum 14% excluding the Integration Related cluster and 24% including this cluster).

As for the evaluation of the creation of the integrated division, a positive evaluation of change is related to a perceived good fit between soldiers of the two nations - as indicated by evaluations of contact and perceived similarity - and support for the motives of the integration. Different to the evaluations of the integrated division, however, opportunities for individual learning and career advancement as well as perceptions that one's unit makes a unique contribution were more important. This suggests that for evaluations of change an understanding what the integration can mean for oneself and one's unit are of particular importance. These findings reflect findings from the broader integration literature, which distinguish between integrations - like Project Taurus - that aim at growth and better performance through synergy realization, versus those that primarily focus on increasing efficiency, for example, by cutting overlapping operations (Larsson & Finkelstein, 1999). Integrations focusing on efficiency can be particularly threatening to employees because this may mean loss of jobs and/or status, which is not (or less) the case with integrations focusing on growth.

When comparing soldiers' evaluation of change caused by the integration with the evaluations of the creation of the integrated division, it can be observed that the evaluations of change are overall somewhat less positive. Nevertheless, the findings still indicate an overall positive evaluation of changes caused by the integration. This is a positive finding since the literature shows that personnel often resist major changes at work (Weick & Quinn, 1999).

#### 4.2.3 Trust in soldiers of the other nation

For all interactions that go beyond strictly regulated exchanges, trust is an important element. Research on trust differentiates between three aspects of trust: Trust that the other has good intentions, trust that the other has sound moral values, and trust that the other has the ability to act

according to their intentions and values. We cover all three aspects of trust with a scale adapted from Mayer and Davis (1999).

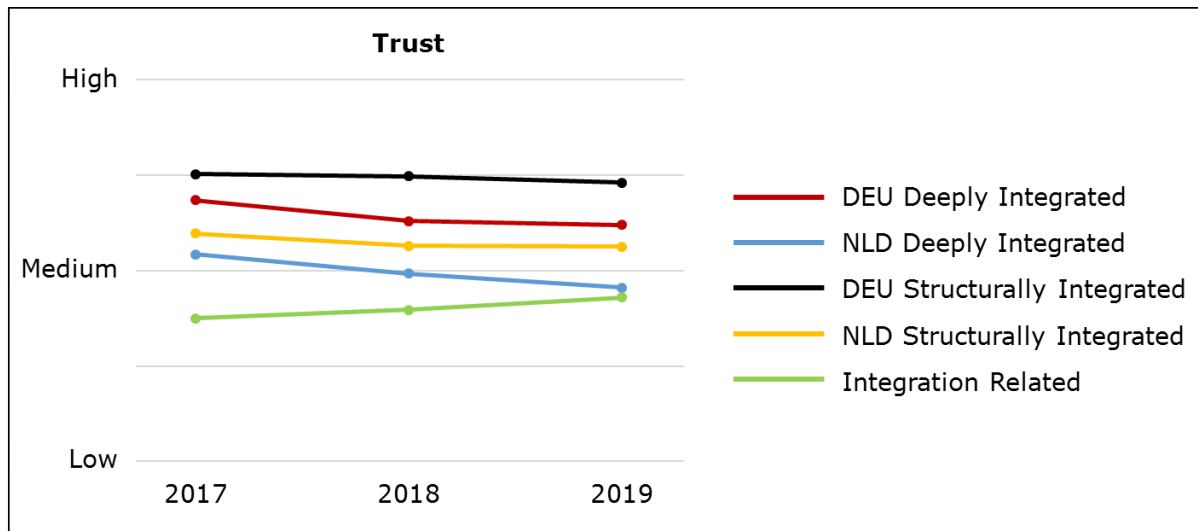


Figure 7 – Average levels of trust in soldiers of the other nation per cluster and year

As can be seen in Figure 7, levels of trust in soldiers of the other nation are relatively spread-out around the mid-point of the scale (maximum difference 38%). The levels of trust decrease somewhat for the DEU Deeply integrated (-7%\*) and NLD Deeply Integrated soldiers (-9%), yet increase for the Integration Related soldiers (6%\*).

Trust has a positive relation with levels of cultural interoperability. Specifically, it is positively related to soldier’s motivation to collaborate and the perceived effectivity of collaboration. Moreover, when zooming in on the Deeply and Structurally Integrated soldiers, it has a negative relation with extra effort. A likely explanation for the positive relation with perceived effectivity and the negative relation with extra effort is that trust reduces the need to control others' work, which makes interactions smoother. For motivation, trust is likely important because it ensures reciprocity and good intentions in interactions.

Trust is closely related to a number of contextual and psychological factors. Relevant factors are seeing opportunities from an individual and military perspective, perceiving complementarities, making a unique contribution, common identification and perceiving similarity. The first three factors hint at an alignment of goals and a positive interdependency – thus because soldiers want the same and can help each other, they trust each other. Feeling a common identity also relates to this – we are one group and everyone in the group shares common goals. Moreover, similarity and shared group norms make the behaviour of the other more predictable which also increases trust.

#### 4.2.4 Common identification and identification with the integrated division

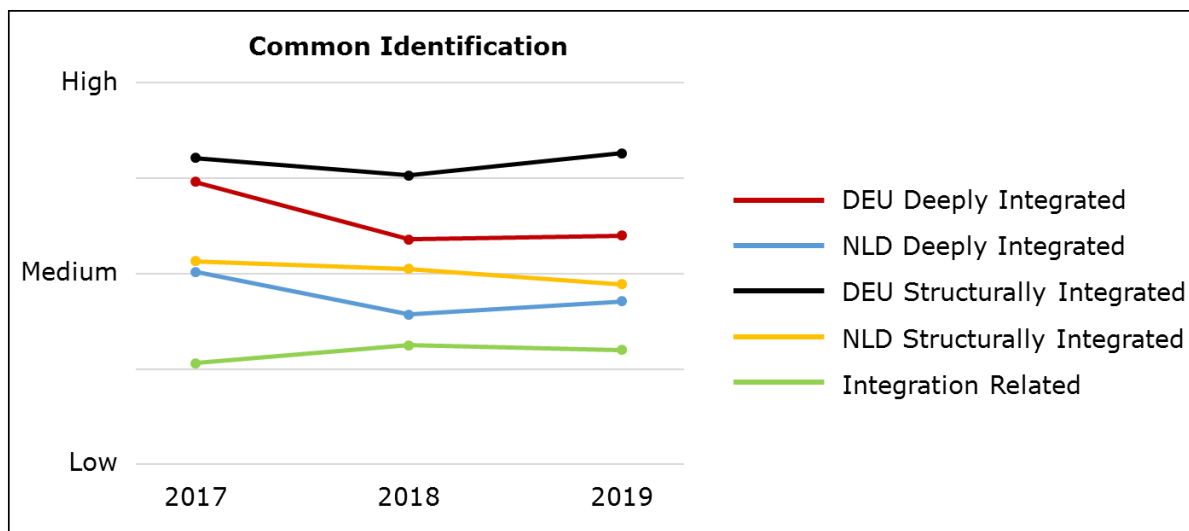


Figure 8 – Average levels of common identification per cluster and year.

To assess soldiers' level of common identity we asked them whether they perceive that Netherlands and German soldiers within the integration all belong to a common group and have shared goals (Gaertner et al., 1993). As can be seen in Figure 8, differences in levels of common identity between the clusters are large (maximum 54%). For three of the cluster levels of common identity decrease from 2017 to 2019; this are the DEU Deeply Integrated (-14%\*), NLD Deeply Integrated (-8%), and NLD Structurally Integrated soldiers (-6%).

Common identification is positively related to soldiers' motivation to collaborate and their perceptions of this collaboration as effective, both indicators of cultural interoperability. These findings are in line with the literature on the well-established Social Identity Approach (e.g., Haslam, 2004). This approach states that when individuals identify highly with a group at work, they derive large parts of their self-esteem from belonging to this group and working towards its goals. Consequently, the goals of the group become the goals of the individual, which motivates him or her to actively pursue these goals. In addition, research on effective intergroup collaboration (Richter et al., 2005) suggests that when members of different groups (e.g. German and Netherlands soldiers) pursue shared goals, they can work together more effectively because they have to be less concerned about the fairness and intentions of the other group (also see 4.2.3 on trust).

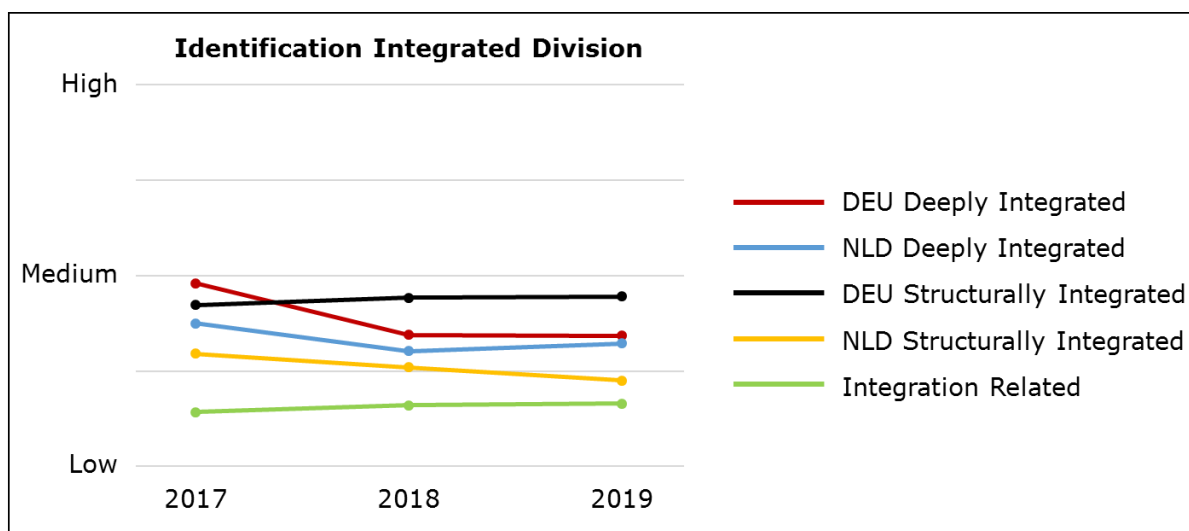


Figure 9 – Average levels of identification with the integrated division per cluster and year.



Using a scale by Mael and Ashforth (1992), we asked soldiers to indicate how much they identify with the integrated division, thus how much they feel attached “to the combination of German and Netherlands units that are fully part of each other”.

As can be seen in Figure 9, overall identification with the integrated division is relatively low and the average levels of identification are relatively spread-out for the clusters (maximum difference 34%). Decreases in level of identification can be observed for DEU Deeply Integrated (-14%\*), NLD Deeply Integrated (-5%) and NLD Structurally Integrated soldiers (-7%).

Overall, soldiers reported higher levels of common identification than levels of identification with the integrated division. Thus, soldiers of the two nations feel more strongly attached to each other than to the integrated division they share. A likely explanation for this finding is that the common identity is more tangible – soldiers actually interact with soldiers of the other nation and thus have to relate to them in some way. The integrated division, in contrast, is an abstract and distal entity, which represents a lived reality for only few soldiers.

A number of observations can be made across the factors trust and common identification. Levels of both these factors range around the mid-point and the average levels of the clusters are spread-out. The German clusters have higher average levels than the Netherlands clusters and the Structurally Integrated clusters higher averages than the Deeply Integrated clusters. For two same clusters we see decreases from 2017 to 2019. These similarities in average levels and changes thereof illustrate the close relation between identifying as a common group and trusting each other.

Levels of the less tangible identification with the integrated division are medium to low. We see a decrease for three of the clusters.

### 4.3 Soldiers' support of the motives of integration

In this section, we present data that show how soldiers regard the motives of the integration. The motives we zoom in on are the opportunities of an integration from a military perspective, opportunities for individual learning and career, and the lighthouse character of the integration. The graphs below are structured in different ways to highlight differences between years or clusters.

#### 4.3.1 Opportunities from a military and individual perspective

Inspired by comments of soldiers in our interviews, interactions and open questions in the surveys, in the 2019 survey we asked soldiers to indicate whether they experienced the integration as an opportunity from a military perspective and for their individual career and learning.

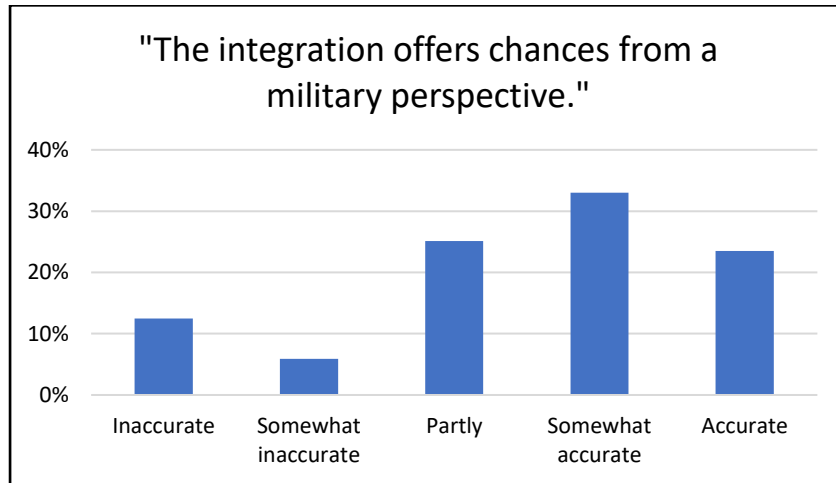


Figure 10a - Distribution of soldiers' agreement with the presented statement on military opportunities

As shown in Figure 10a, a majority of soldiers (56%) agreed that the integration offers opportunities from a military perspective and only a small share of soldiers (18%) disagreed. An inspection of the distributions per clusters (not displayed here) shows a larger percentage of the Structurally Integrated soldiers (up to 81%) agree that there are military opportunities. This likely reflects that soldiers in the Structurally Integrated clusters are mostly working at higher levels of the armies. Soldiers from the Integration Related units somewhat more often do not agree (26%).

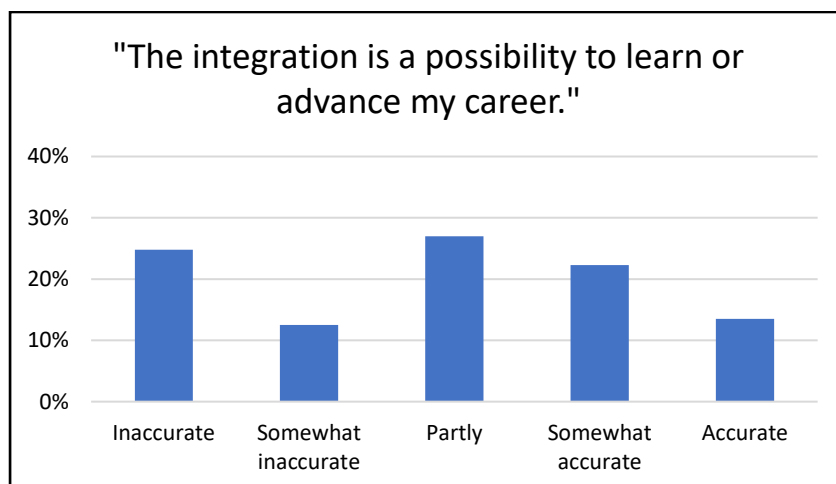


Figure 10b – Distribution of soldiers' agreement with the presented statement on individual opportunities

Figure 10b shows that 36% of soldiers agree that the integration offers opportunities for them personally to learn or advance their careers. A similar percentage does not agree (37%). Particularly, NLD Deeply Integrated soldiers reported to a very high percentage individual learning and career opportunities (72%). In contrast, of the Integration Related soldiers, 48% do not see individual opportunities in the integration. This likely reflects that the Integration Related soldiers have limited involvement in the integration and less contact with soldiers of the other nation (also see 4.5).

Additional analyses reveal that soldiers who perceive opportunities from a military perspective, as well as those who see individual opportunities, are more motivated to collaborate, identify more strongly with the integrated division and evaluate the integration more positively. A test of the relative influence of the two opportunities reveals that for motivation and evaluation of the integration both opportunities have an important influence. For identification, in contrast, individual opportunities are the dominant factor – when the individual opportunities are accounted for opportunities from a military perspective are no longer relevant.

Taken together, these findings indicate that soldiers overall believe that the integration offers opportunities from a military point of view. The number of soldiers who see individual opportunities is somewhat lower, however, there are large differences between the different clusters. The positive impact of perceived opportunities on motivation and the evaluations, suggests that opportunity perceptions of the integration contribute to reported high levels of cultural interoperability, and positive attitudes towards the integration.

#### 4.3.2 Recognition of and pride in the lighthouse project (only Panzerbataillon 414)

The soldiers of Panzerbataillon 414, as the most pioneering and deeply integrated unit of Project Taurus, were asked to indicate whether they recognize the creation of their unit as a ‘lighthouse project’ for European military integration and whether they take pride in this.

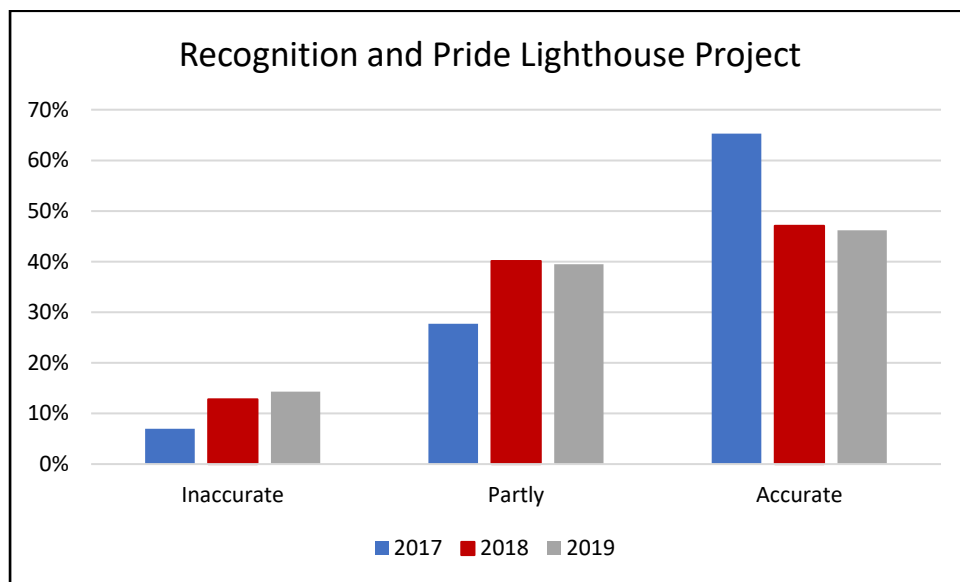


Figure 11 - Distribution of soldiers' agreement regarding the lighthouse character of Panzerbataillon 414.

As can be seen in Figure 11, a substantial percentage of soldiers recognized the lighthouse character and took pride in it 2017, 2018 and 2019. The initial peak of enthusiasm in 2017, with more than 60% of soldiers embracing the lighthouse character of the integration, might reflect an initial euphoria that has been reported for other instances of organizational change (Elrod & Tippett, 2002).

Soldiers who recognize and feel pride in the lighthouse project, are more motivated to collaborate, identify more strongly with the integrated division, and evaluate the integration more positively.

Taken together, the data presented in this Section 4.3 indicate that soldiers recognize the motives of the integration which relates positively to their motivation, evaluations of the integration and identification. Soldiers in the Integration Related clusters associate less with the motives.

## 4.4 Soldiers' recognition of the fit of the Netherlands and German army

In this section, we present findings about the (perceived) cultural fit between German and Netherlands soldiers. More specifically, we show how similar soldiers perceive soldiers of the other nation to be and how they evaluate the contact with these soldiers. In addition, we give an overview of how German and Netherlands soldiers describe themselves and soldiers of the respective other nations. Self- and other-descriptions are highly informative to understand cultural differences and similarities. Cultural fit, which goes beyond similarity, is an important element of integration success (Teerikangas, 2012; Larsson & Finkelstein, 1999).

### 4.4.1 Effects of contact prior to the integration

In our survey, we asked soldiers whether they had worked with soldiers of the other nation prior to Project Taurus. Literature suggests that having had experiences with an integration partner prior to the integration can positively influence integration outcomes (Teerikangas, 2012). Indeed, also in our data, we find that soldiers who have worked with soldiers of the other nation prior to the integration (e.g. by having worked as a staff member at 1GNC) are more motivated to collaborate.

### 4.4.2 Evaluation of contact with soldiers of the other nation

Instances of contact with members of another group can be evaluated as either positive or negative – this is crucial for the effect such instances of contact may have (e.g. in terms of motivation to collaborate). Therefore, soldiers were asked to report how they evaluate their contact with soldiers of the other nation in the context of Project Taurus.

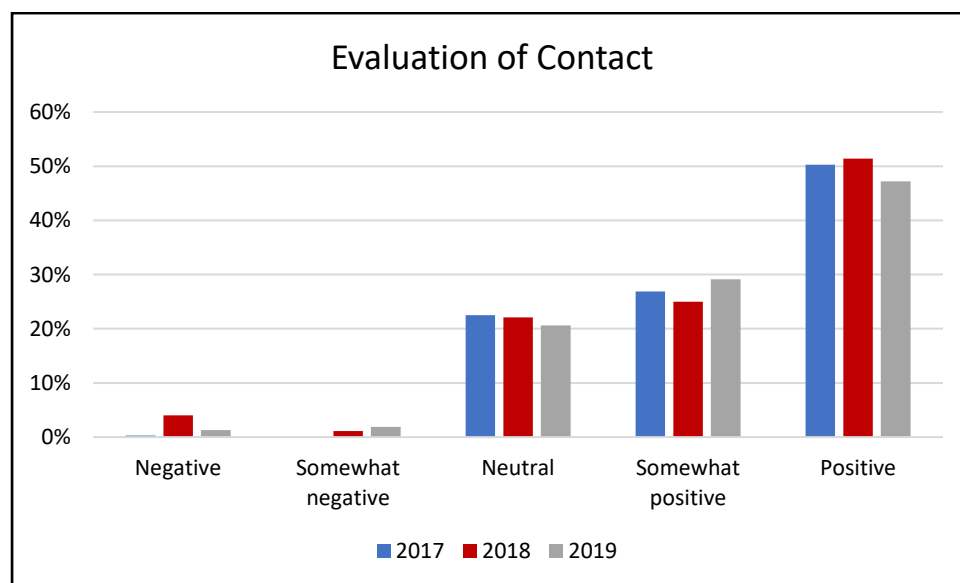


Figure 12 – Distribution of soldiers' evaluation of contact (excluding the cluster Integration Related)

Figure 12 shows that, taken together, in each year almost 80% of the soldiers in the Deeply and Structurally Integrated clusters are positive about their contact with soldiers of the other nation. Only very few soldiers are negative about the contact. Soldiers in the cluster Integration Related were excluded from this graph and the correlations below because they have had, until now, very limited contact with soldiers of the other nation.

Soldiers who have had more contact with soldiers of the other nation are also more positive about this contact. While this seems intuitive, conflict between groups in integrations is not uncommon (Seo & Hill, 2005) and negative contact can have a substantial negative impact (Paolini et al., 2010). The

well-established contact hypothesis (Allport, 1954; Pettigrew & Tropp, 2006) formulates conditions under which contact between members of different groups is most likely to have positive effects. At least three of the conditions do, according to our judgement, apply in the present integration: First, leadership encourages friendly and helpful contact. Indeed, the integration was implemented top down thus leadership support can be assumed. Second, the contact is meaningful and cooperative. As will be outlined in Section 4.6, soldiers derive meaning from the utilization of complementary skills and knowledge of soldiers from both nations. Third, groups have to pursue a common goal. Many soldiers perceive Netherlands and German soldiers to be one group which is related to pursuing common group goals (see 4.2.4). Moreover, as outlined in Section 4.3, a large number of soldiers support the motives of the integration, which revolve around goals shared by the Netherlands and German armies.

#### 4.4.3 Perceived similarity

In the surveys, soldiers were asked to indicate how similar they and soldiers of the other nation are in general, with regard to the work atmosphere, and their values and beliefs (Van Knippenberg et al., 2002). Generally, people who perceive each other as being similar hold more positive attitudes towards each other (e.g. Strauss et al., 2001). It is insightful to inspect *perceived* similarity as individuals may weigh particular similarities and differences more strongly (also see 4.4.4), which can influence their attitudes and behaviours.

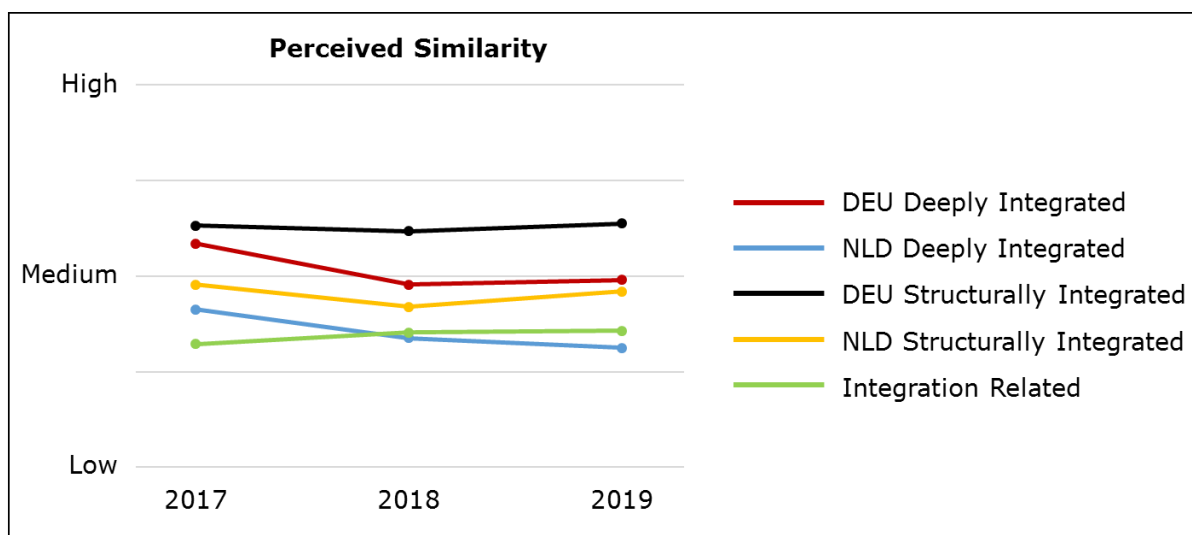


Figure 13 – Average levels of perceived similarity per cluster and year

Soldiers' perceptions of the similarity between themselves and soldiers of the other nation are located around a medium level of similarity ranging from somewhat high to somewhat low. The clusters are relatively spread out with a maximum difference of 33% between the highest and lowest average score. For DEU (-10%\*) and NLD (-10%) Deeply Integrated soldiers a decrease in perceived similarity can be observed.

Soldiers who have more contact with soldiers of the other nation report higher levels of similarity. However, this relation is relatively unstable. When the control variables are included (i.e. age, rank, nationality, clusters) the effect is small but significant in 2017 and 2018, but not in 2019. The effects per cluster show that the effect of contact on perceived similarity is significant for the DEU Structurally Integrated soldiers (in 2018 and 2019), the NLD Structurally Integrated soldiers (in 2017 and marginally in 2019) and the Integration Related soldiers (in 2018 and 2019), but not for the Deeply Integrated soldiers. This is a sign that, next to contact, other factors influence levels of perceived similarity. These other factors occur to relate to being deeply integrated.

Perceiving similarity relates positively to cultural interoperability and attitudes regarding soldiers of the other nation. More precisely, soldiers who perceive more similarities report higher motivation, effectivity, identification and trust. When zooming in on Deeply and Structurally Integrated soldiers, similarity has a negative relation with extra effort.

In sum, levels of perceived similarity range around the medium level and are relatively spread-out. For the Deeply Integrated soldiers, there is a decrease over time. Having contact is one factor related to similarity, however, others seem to be at play.

#### 4.4.4 Self- and other-description of German and Netherlands soldiers

To understand how soldiers see themselves and soldiers of the other nation, in the surveys we asked them to write down characteristics, specialties, qualities, principles, aims, and activities that describe typical soldiers of their and the other nations' army (i.e. Deutsches Heer and Koninklijke Landmacht) using instructions developed by Turner-Zwinkels et al. (2015). Subsequently, we aggregated the descriptive words the soldiers generated (hereafter called *descriptors*) into a number of themes.

We identified the following six themes:

- *Professional/competent*: Descriptors that fall under this theme refer to the skills, knowledge and experience soldiers have with executing their tasks. Moreover, the descriptors can refer to the professional attitude soldiers show at work by, for example, being reliable, integer and respectful.
- *Motivation*: Descriptors in this theme refer to the commitment soldiers show at work, such as being eager to fulfil duties and going beyond what is officially requested from them. The descriptors can also refer to the meaning and pride soldiers derive from their job, which make them invest in their work.
- *Social*: Descriptors in this theme refer to the social dimension of soldiers' work. This can be having pleasant interactions and a good atmosphere, but also experiencing social support when this is needed. The word "kameradschaftlich"/"kameraadschappelijk" is often used.
- *Direct*: Descriptors in this theme refer to the way soldiers communicate with each other. If references are made about how soldiers are bolt, to the point and direct when communicating, this falls into this theme.
- *Open*: Descriptors in this theme refer to being open-minded towards others, changes and new experiences. The theme also entails a curious attitude and interest to learn.
- *Flexible*: Descriptors in this theme refer to a way of working that emphasizes self-initiative and a can-do mentality. Hierarchy is less strong then elsewhere and interactions are often informal. Creativity and independent thinking are valued.
- *Robust*: Descriptors in this theme refer to a way of working where structure and centralization are implemented to achieve effectivity, and where a focus on details is important. Rules are to be followed and decisions will be taken at a higher level. Interactions are characterized by hierarchical relations and a formal tone.

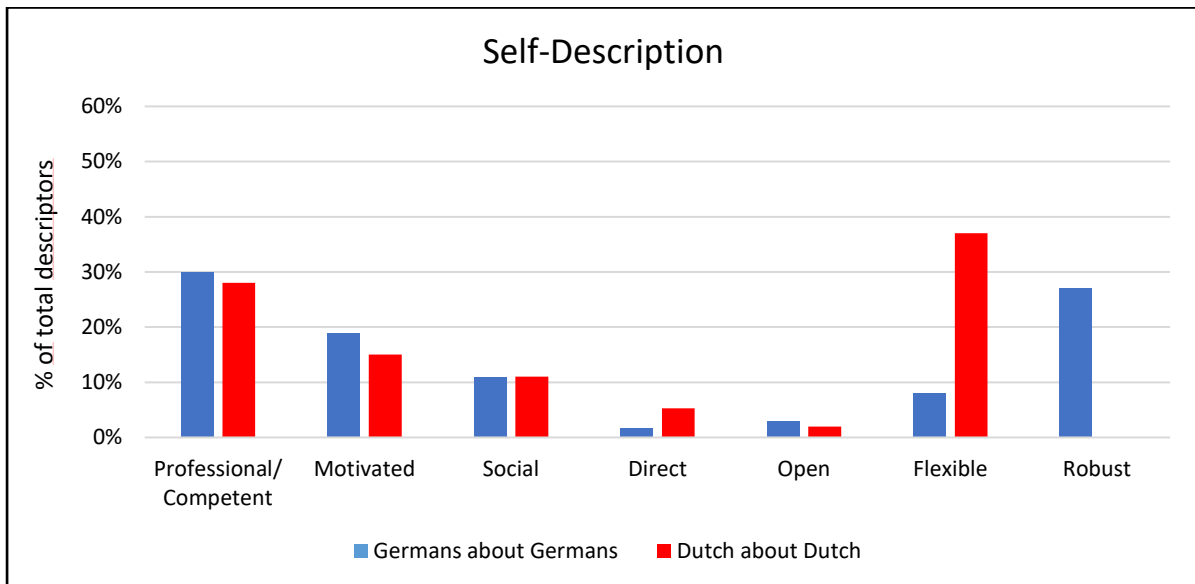


Figure 14 – Percentage of all self-descriptors that fall within a theme (2019)

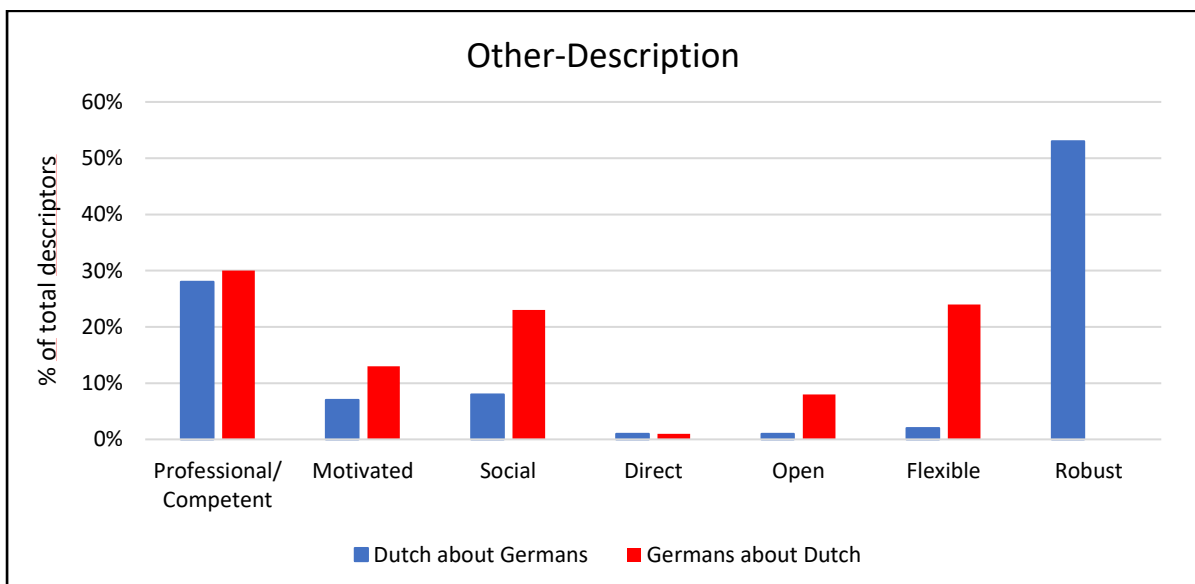


Figure 15 – Percentage of all other-descriptors that fall within a theme (2019)

*Similarities and differences in the self- and other-descriptions of the German and Netherlands soldiers*

As is observable in Figure 14, both German and Netherlands soldiers describe themselves as professional/competent, motivated and social. Further, the ranking of these three themes is similar for soldiers of both nations with professional/competent being mentioned most often, followed by motivation and finally socialness. Figure 15 indicates that soldiers of the respective other nation too, see German respectively Netherlands soldiers as professional/competent. Noteworthy is that German soldiers emphasize the socialness of Netherlands soldiers more than the Netherlands soldiers themselves.

Figure 14 also shows in which themes the self-description of German and Netherlands soldiers differ. Directness of communication and openness show some differences but, overall, these differences seem to be less prominent than the other themes. For flexibility and robustness, the picture is clear-cut: Being flexible is the most mentioned theme for Netherlands soldiers and is seldom mentioned by German soldiers describing themselves. Being robust is often mentioned by German soldiers and



extremely rare in the self-description of Netherlands soldiers. Thus, cultural differences between Netherlands and German soldiers are strongly focused on these two themes.

This finding regarding cultural differences is further underpinned by the other-descriptions in Figure 15. German soldiers describe Netherlands soldiers as flexible but do not refer to robustness. In contrast, a large percentage of Netherlands soldiers' descriptors of German soldiers refers to these soldiers' robust way of working, yet flexibility is rarely mentioned. While German and Netherlands soldiers mostly used positive descriptors related to flexibility respectively robustness, they sometimes also regard the way of working of the other nation critically. For example, some German soldiers described Netherlands soldiers as too relaxed and too fond of discussions. Netherlands soldiers in turn, for example, describe German soldiers as overly precise and obedient to rules.

Taken together, the self- and other-descriptions paint a consistent picture with professionalism, motivation and socialness as shared characteristics and flexibility versus robustness as most prominent difference between the German and Netherlands soldiers. The other-descriptions suggest that German soldiers - highlight socialness, motivation and some openness - are somewhat more positive about Netherlands soldiers than vice versa. This is in line with intergroup research on integrations (Terry et al., 2001) which finds that the bigger partner in an integration often sees the smaller partner more favourable because it has to adapt less. This could also be, part of, the reason why Netherlands soldiers stress the German robust way of working - they may have more necessity to adapt to this way of working.

#### 4.5 Frequency of contact with soldiers of the other nation

Soldiers within Project Taurus have contact with soldiers of the other nation with different frequencies, ranging from never having contact to having contact on a daily base. Figure 16 a, b and c show for each of the clusters how frequently soldiers have face-to-face contact with soldiers of the other nation. The data presented here is from the 2019 sample to give an impression of the frequency of contact at a later stage of the integration process. For reasons of clarity, we show the Deeply Integrated, Structurally Integrated and Integration Related clusters in separate graphs.

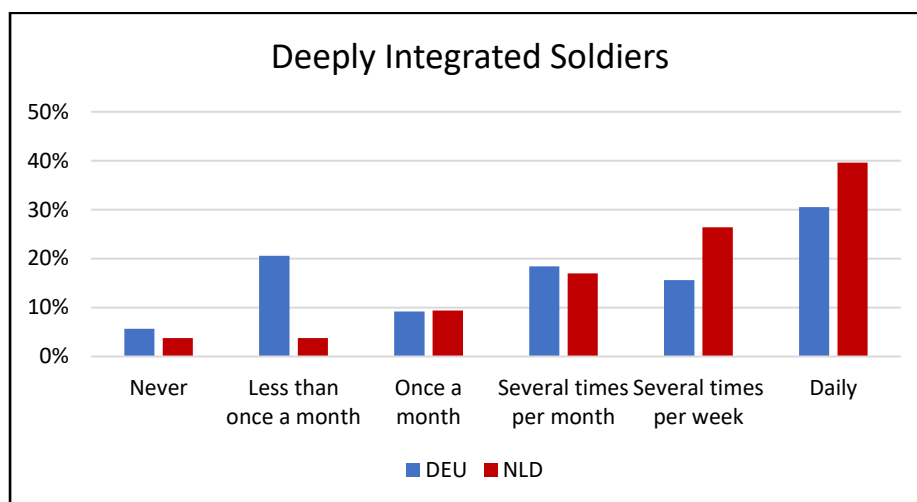


Figure 16a – Distribution of soldiers over different frequencies of contact (2019)

Figure 16a shows that the NLD Deeply Integrated soldiers have more contact with soldiers of the other nation than the DEU Deeply Integrated soldiers. This is likely because in the units sampled, the Netherlands soldiers are in the minority and they have many German colleagues around. It should be noted that of the German soldiers, even in the Deeply Integrated cluster, 36% report to have contact with soldiers of the other nation only once a month or less. These are primarily soldiers in purely German companies.

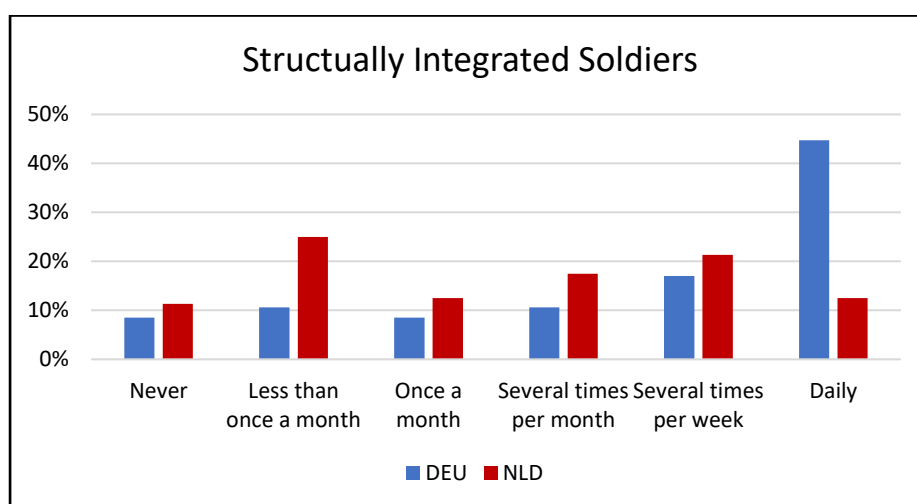


Figure 16b – Distribution of soldiers over different frequencies of contact (2019)

Figure 16b shows the frequency of contact for Structurally Integrated soldiers. For the NLD Structurally Integrated soldiers, we see a similar pattern as for the DEU Deeply Integrated soldiers: there is a substantial number of soldiers (49%) who have contact only once a month or less. Overall, the

frequency of contact of the NLD Structurally Integrated soldiers is comparably low. 59% of the DEU Structurally Integrated soldiers report that they have daily contact.

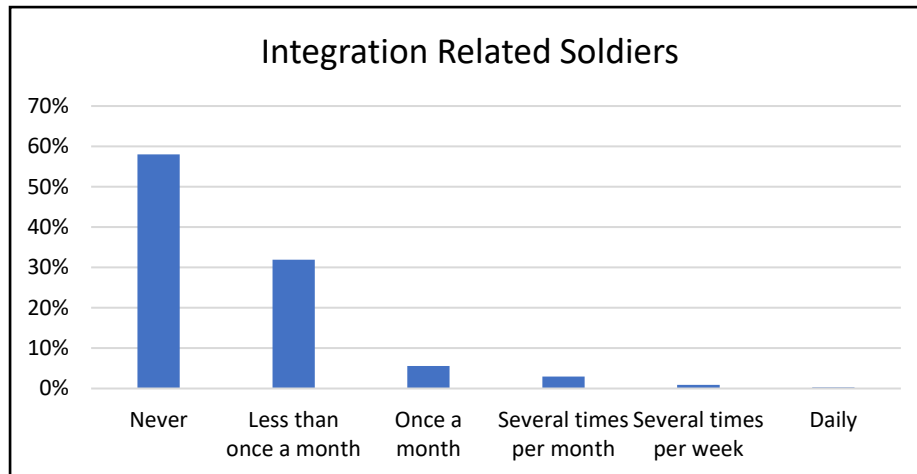


Figure 16c – Distribution of soldiers over different frequencies of contact (2019)

\*Note: The scale differs as compared to Figure 16a and b.

Figure 16c shows the frequency of contact for Integration Related soldiers. Here a majority of soldiers never have contact (58%) and another 32% percent have contact less than once a month. Thus, overall soldiers in the Integration Related cluster have little contact.

When looking at the relation between soldiers’ rank and frequency of contact within the different clusters, we find that soldiers with a higher rank have more contact with soldiers of the other nation and that this relation is more pronounced at the level of battalions<sup>3</sup>.

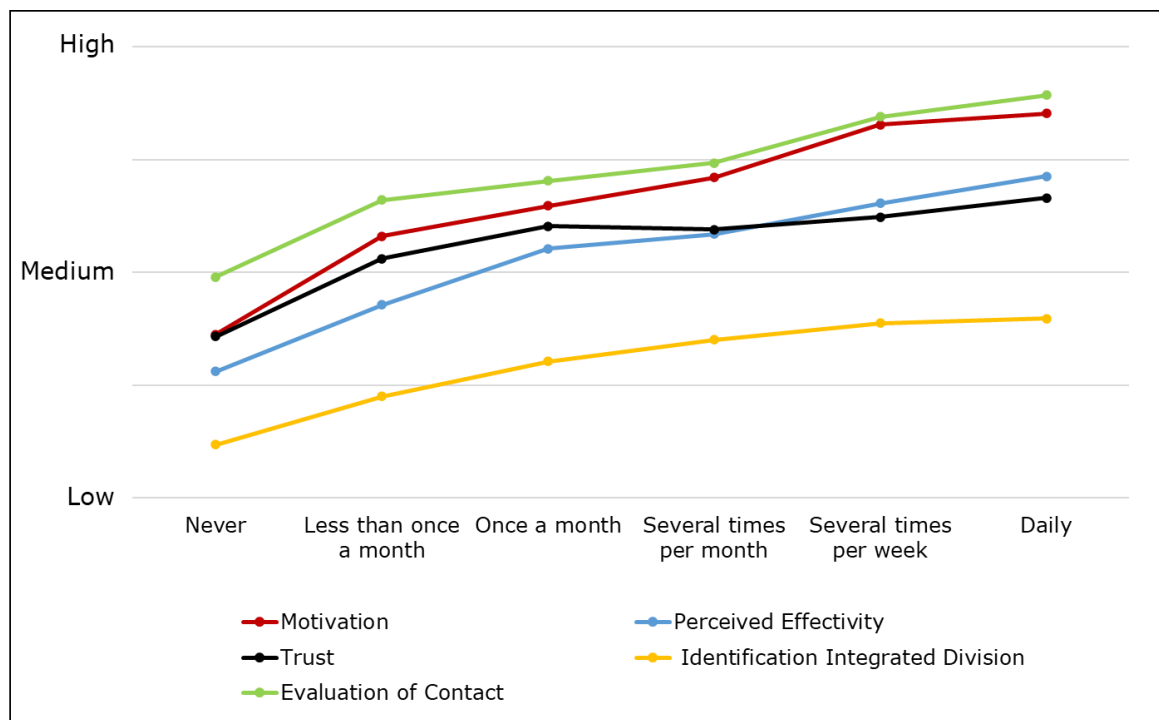


Figure 17 – Relation between frequency of contact and different outcome variables (2019)

<sup>3</sup> In the clusters with Deeply Integrated soldiers, we see a medium to strong relation between having a higher rank and having contact more frequently ( $r = .47$  to  $.72$ ). This relation is somewhat less pronounced for Structurally Integrated soldiers ( $r = .19$  to  $.45$ ). In the Integration Related cluster, we find medium relations ( $r = .33$  to  $.41$ ).

Figure 17 shows the positive effects of having more face-to-face contact. It increases motivation, effectivity, trust and identification. Moreover, soldiers who have more contact are also more positive about this contact (also see section 4.4.2).

Taken together, the data in this Section 4.5 indicate that many soldiers in the Deeply and Structurally Integrated clusters have contact on a regular base, however, there is also a substantial number of soldiers in each cluster (up to 49%) who have contact only once a month or less. In the Integration Related cluster, only very few soldiers have contact regularly. When contact is taking place, it has many positive effects.

#### 4.6 Synergy: The utilization of complementary knowledge and skills

In this section, we describe the relevance of complementarities and the utilization hereof for soldiers' identification and motivation.

In the surveys, soldiers indicated to what extent they perceive that German and Netherlands soldiers have skills and knowledge that, if combined, could achieve better outcomes – this is termed complementarity (Oosterhof et al. 2009). Moreover, soldiers were asked to what extent they perceive that their unit makes a *unique* contribution to the functioning of the integration (Guerra et al., 2016). In other words, are the complementary skills a soldiers' unit offers utilized as a contribution to the success of the integration. Soldiers who see complementarities between themselves and soldiers of the other nation identify more strongly with the integrated division and are more motivated to collaborate. The combined effect of complementarity and unique contribution on identification with the integrated division is clear from Figure 18.

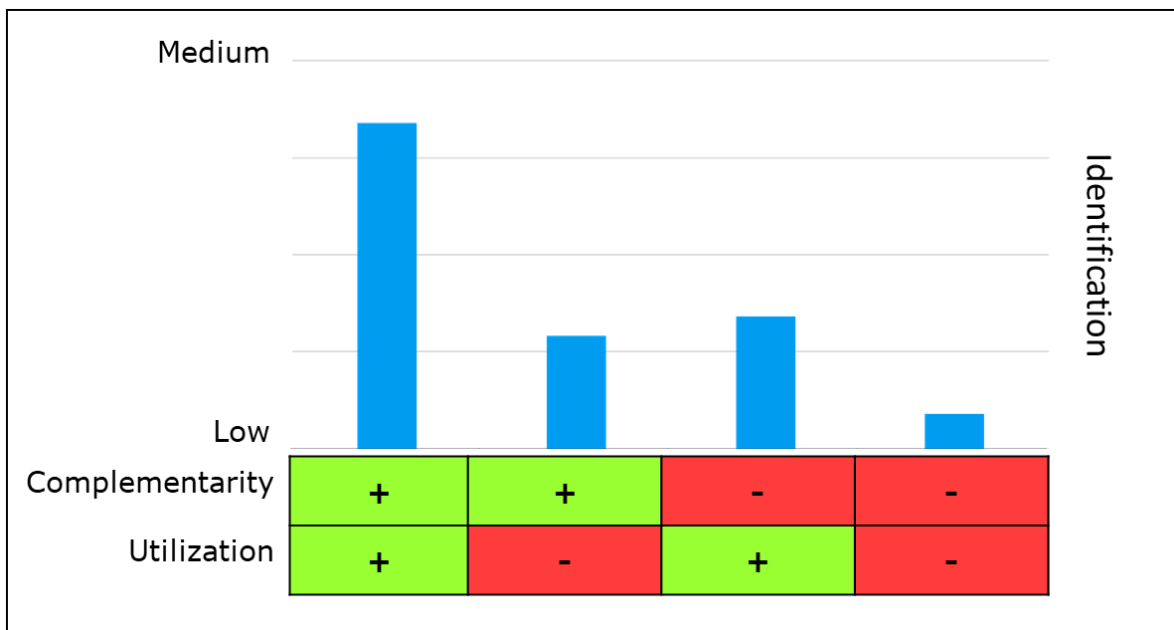


Figure 18 – Average levels of identification with the integrated division for groups of soldiers with different levels of complementarity (high vs. low) and unique contribution (high vs. low) (2019)

In Figure 18, soldiers are divided into four groups according to their perceptions about complementarity (high vs. low) and the unique contributions (high vs. low) of their unit. The bars indicate how much, on average, soldiers that fall into one of the four groups identify with the integrated division. The graph shows that the combined effect of perceiving high complementarity and perceiving one's unit to make a unique contribution results in a relatively high level of identification with the integrated division, while if both are low, also the identification is low. Thus, both factors strengthen each other and their combination is relevant for the identification with the integrated division. For soldiers' motivation to collaborate we find a similar yet somewhat less pronounced pattern.

## 4.7 Soldiers' suggestions for improving German-Netherlands collaboration

In the surveys, soldiers were asked to write down suggestions for “what could be done to facilitate and or improve the collaboration with German/Netherlands soldiers?”. In 2019, soldiers made a total of 423 suggestions. In the following, we introduce the three most frequently suggested measures to improve and facilitate collaboration.

### 1. More collaboration and contact (30%):

The largest number of suggestions is about having more collaboration and contact. This can refer to social and team-building activities (e.g. sport events, cultural events), exchange programs, work visits, more exercises together and deeper integration. Concrete suggestions for deeper integration are to mix pelotons and having more soldiers of the respective minority in a staff or unit.

### 2. Language (22%):

Many soldiers suggest that there should be more English, Dutch and/or German language training. Soldiers do not only expect soldiers of the other nation to improve their language skills, but often also state that they themselves have to improve. For soldiers who are placed in a mixed unit, soldiers would welcome language training *prior* to the placement. Moreover, there are several requests to more often and persistently (where English already is the official language) use English as language of communication.

### 3. Harmonized doctrines, procedures, and regulations (10%):

Many soldiers did put forward that further development of harmonized and shared doctrines, procedures and regulations would improve and facilitate their collaboration with soldiers of the other nation; for instance, the diverging rest-periods of German and Netherlands soldiers, as well as unclear/parallel command lines were mentioned. While well-known, such obstacles still play a role in daily working conditions according to soldiers' experiences and may call for resolution in the design of future integrations, to avoid negative expectations of soldiers.

## 5 Conclusions and recommendations

In this section, we bring together the different themes discussed in Section 4, to arrive at broader conclusions. These conclusions form the basis for recommendations aimed at the ongoing integration project. Recommendations for future integrations are discussed in Section 6.

### **Cultural interoperability, attitudes towards the integration and soldiers of the other nation**

This study captures an extensive picture of soldiers' experiences in the integration by assessing cultural interoperability, as well as attitudes regarding the integration and soldiers of the other nation. It moreover divides soldiers and their experiences in meaningful clusters according to soldiers' depth of involvement in the integration. This reveals the following information:

Overall, soldiers' levels of interoperability over the years were high, and their evaluations of the integration were positive. Over the three years, trust and common identification (i.e. feeling as one group) are at a medium level and identification with the integrated division is medium to low. Together, this indicates that soldiers' experiences in the integration are positive, yet there is room to further improve the relations between Netherlands and German soldiers.

An inspection of the clusters in separation, reveals additional information. The DEU Structurally Integrated soldiers have the highest averages of cultural interoperability, the evaluations, trust, and the identifications. On the other end are the Integration Related soldiers which, except for extra effort, have the lowest averages. The other three clusters are located in the "corridor" between these clusters. When zooming in on the DEU and NLD Deeply Integrated soldiers, it can be seen that while motivation is the same, extra effort caused by the integration is higher for the Netherlands soldiers and the collaboration is felt as somewhat less effective. While both similarly identify with the integrated division, the Netherlands soldiers score relatively lower when asked whether they feel as one group with German soldiers and having trust. The differences between the clusters likely are a function of soldiers' frequency of contact, the extent to which their work environment and work activities change because of the integration, the position of soldiers' unit in the hierarchy, and whether soldiers form the national majority or minority in their unit.

For many of the indicators of interoperability and the attitudes decreases of the average levels from 2017 to 2019 are reported. In two instances, however, we also see increases. While the decreases are never severe and not in all instances statistically significant (also see Section 3), in their number they may be an indication of (future) challenges. Research conducted in the 1 German/Netherlands Corps between 1995-2005 showed that soldiers' attitudes were still changing years after the start of the integration (Moelker et al., 2006).

**Recommendation:** Observations regarding levels of interoperability and soldiers' attitudes for different clusters can, in combination with leaders' assessment, offer starting points for steering actions. Continued monitoring of levels of interoperability and attitudes beyond the present study may capture trends at an early stage.

### **Frequency of contact between German and Netherlands soldiers**

The data in this report show that contact between soldiers of the two nations is not an automatic given in integrations – even in some deeply integrated units a notable number of soldiers does not have regular contact. Having more contact is positive for soldiers' motivation to collaborate, perceived effectivity when collaborating, trust in soldiers of the other nation and identification.

The just discussed positive effects of contact, together with the fact that soldiers are positive about the contact they have and, when asked to suggest improvements for the collaboration, advocated for

more contact and collaboration, are signs that overall soldiers would welcome having more contact with soldiers of the other nation.

**Recommendation:** Create opportunities for work-related contact for Netherlands and German soldiers beyond what is necessary for the immediate functioning of the integrated units. Soldiers made concrete suggestions on how to create more contact (see 4.7).

#### **Fit of the Netherlands and German army – similarities and complementarities**

The present study identifies professionalism/competence, motivation and socialness as similarities between German and Netherlands soldiers and a flexible versus robust way of working as the main difference between them. Moreover, the data indicate that both similarity and complementarity have positive effects on cultural interoperability.

As stated in Section 4.4, similarity is a basis for good collaboration. It relates to high levels of trust, identification, more perceived efficiency and less extra effort when working together. Potentially, the specific similarities between Netherlands and German soldiers, which all are desirable in a good comrade, further intensify this effect. However, the utilization of complementarities (see 4.6), combining the different ways in which German and Netherlands soldiers work, is what gives meaning to the integration by realizing the opportunities which soldiers anticipate and making soldiers a valuable part of the integrated units. Thus, the fit of the Netherlands and German army lies in both their similarities and complementarities.

**Recommendation:** In the management of Netherlands-German fit, similarities *and* differences between soldiers should be a focus. When effectivity and group identification are required, the shared comradely traits can be emphasized. Efforts to further harmonize German and Netherlands doctrines, rules and regulations offer opportunities to utilize complementarities of the German and Netherlands army.



## 6 Exploratory questions when planning future integrations

We recommend using the questions below when planning and executing future integration efforts. Answers to these questions, and the discussion around this, can guide decision making regarding the structure of the integration, the communication towards soldiers, the resources that should be allocated and the (correcting) actions that can be taken as the integration progresses. The answers to the first three questions can be combined in a narrative which, when being explicitly communicated prior to and repeated during an integration project, can make soldiers enthusiastic about the integration and maintain this during the upcoming changes. Research on identity narratives, identity leadership, and sense-making offers suggestions on how to develop narratives (e.g. Haslam, Reicher, & Platow, 2010; Ravasi & Schultz, 2006).

### **1. Why does the integration take place?**

Integrations require investments from all parties involved, this includes individual soldiers who have to adjust to changes in their work environment and work activities. Therefore, it is crucial to clearly communicate down to the lowest level why the integration is necessary and what opportunities it offers. It is best when the necessities and opportunities are present at several levels from the political- down to the individual-level.

Our research indicates that soldiers globally recognize the necessities and opportunities of German-Netherlands army integration (see 4.3).

### **2. What can soldiers expect from the integration? What will be done to prepare them?**

Integrations are a source of uncertainty because they change soldiers' work environment and work activities. Moreover, integrations require interactions with soldiers of another nation; these soldiers often think and behave differently. Uncertainty is a major source of stress in integrations (Hogg, 2007). Leaders can address uncertainty by providing information about the character and extent of the planned changes and by briefing soldiers about similarities and differences with soldiers of the other nation. This is, in fact, a form of expectation management: It prepares soldiers as to how deeply they will be involved in the integration and sets expectations regarding challenges and learning opportunities when interacting with soldiers of the other nation.

In this report, we suggest that many soldiers expected a stronger involvement in the integration (see 4.5) and present cultural insights regarding similarities and differences between German and Netherlands army soldiers (see 4.4). These cultural insights can be used during onboarding procedures, cultural trainings or in reading materials to prepare soldiers for bi-national interactions.

### **3. What is the “unique selling point” of the integration?**

An important source of identification is when group members experience their group to be positively distinct from other groups (Brewer & Roccas, 2001). In the context of a military integration, this means that the integration and all the units that are part of it should stand for something unique and positive. For Project Taurus, leaders highlighted the lighthouse character of the integration which related to numerous positive outcomes (see 4.3).

### **4. How does the structure of the integration affect different units and soldiers?**

The structure of integrations can take many different forms. For example, in Project Taurus the integration is a hierarchical layering of German and Netherlands units with exchange officers and a Netherlands contribution to a German tank battalion. Dependent on its structure, an integration affects soldiers in different ways and to different extents. For example, soldiers may have contact

rarely or very frequently, they may be part of the majority or minority in their bi-national unit. In this study, the different ways in which the integration affects soldiers are captured by grouping soldiers in different clusters (see Section 4). While this is likely effortful, tailoring training, steering activities, and communication to the specific situations of soldiers can be expected to achieve better outcomes in terms of cultural interoperability.

Additionally, from a cultural interoperability perspective, we recommend to design integrations in such a way that as many soldiers as possible have contact with a high frequency (see 4.5). This can be done by mixing units to a greater extent but also by structurally arranging trainings, educations, exchanges and events that create interactions. In the context of Project Taurus, we find that a high frequency of contact is perceived as positive and has multiple positive outcomes (see 4.5).

#### **5. What will be done to ensure the realization of synergies?**

A main motive for integrations is to create synergy effects. Economic and political analyses indicate that European military integration has substantive synergy potentials (e.g. Bekkers et al., 2012). Focused on the human factor, the present study shows that soldiers recognize German and Netherland soldiers to have complementary knowledge and skills. The utilization of these complementarity knowledge and skills not only marks synergy realization, it also increases cultural interoperability (see 4.6). Yet, multiple factors (e.g. force of habit, dominance of the majority) are likely to work against the utilization (Gleibs et al., 2013). Therefore, to ensure the realization of synergies in the human factor domain, plans for integrations should explicitly specify goals and procedures for the utilization of soldiers' complementary knowledge and skills.

#### **6. Integrations require extra effort. What are sources of extra effort? How can these be addressed?**

Integrations cause extra effort (Essens & Bekkers, 2014). Our findings indicate that soldiers who have to invest extra effort are less motivated and less positive about the integration. Moreover, we show that the extra effort that has to be invested is unequally distributed between soldiers (see 4.1). In Project Taurus, sources of extra effort are among others: communication in a non-native language, differences in procedures, regulations and technical equipment, receiving commands from two command lines, and representative obligations. Future integration efforts should address these sources of extra effort by design and/or provide units with the necessary means to handle them.

#### **7. What support can be organised for the key personnel of the integration?**

Integrations pose challenges for leaders and key personnel beyond the "regular" management of military units and headquarters. Leaders and key personnel can be supported in overcoming these challenges through the provision of expert knowledge and data on personnel at all levels. Knowledge on how to deal with integration challenges is available in- and outside of the military and can be made available through (scientific) advisors. Research activities like the present study and the recent Applied Military Cultural Interoperability (AMiCi) study by TNO can provide novel, context-specific data and insights that are useful for the integration in question as well as future integration efforts.

#### **8. When has cultural interoperability successfully been achieved?**

Achieving cultural interoperability is not a goal of integration efforts but a precondition to achieve the integration efforts' goals. Ultimately, the goals of military integration efforts will lay in the

operational domain. However, integrated performance cannot be expected to be high if soldiers are not motivated or not able to work together effectively with low extra effort.

In general terms, cultural interoperability is successfully achieved if soldiers are highly motivated to work with soldiers of the other nation and effective in realising their work. Working in an integrated context will always create some extra effort, but this should be balanced with the additional value of the integration. High effectivity and low extra effort entail soldiers' ability to work together, which refers to a sufficient understanding of the other nation's military and knowing how to apply this understanding in interactions.

Assessment of cultural interoperability, using the indicators developed in the present study (see 4.1), separately or in the context of a broader assessment, provides a systematic way to reflect and discuss with soldiers how to craft and improve the collaboration with the integration partner.

## 7 References

- Allport, G. W. (1954). *The nature of prejudice*. Reading, MA: Addison-Wesley.
- Brewer, M. B., & Roccas, S. (2001). Individual values, social identity, and optimal distinctiveness. In C. Sedikides & M. B. Brewer (Eds.), *Individual Self, Relational Self, Collective Self* (pp. 219–237). London: Psychology Press.
- Bekkers, F., De Boer, M., Van Esch, J., Korteweg, R., Selleslaghs, J., & Wijninga, P. (2012). *De waarde van defensie*. The Hague: The Hague Centre for Strategic Studies.
- Elrod, P. D., & Tippett, D. D. (2002). The “death valley” of change. *Journal of Organizational Change Management*, *15*, 273-291.
- Essens, P. J. M. D., & Bekkers, F. (2014). *Cost benefit analysis strategic cooperation (COBASCO): Casestudy deep integration* (TNO report No. R11561). Soesterberg, The Netherlands.
- Gaertner, S. L., Dovidio, J. F., Anastasio, P. A., Bachman, B. A., & Rust, M. C. (1993). The common ingroup identity model: Recategorization and the reduction of intergroup bias. *European Review of Social Psychology*, *4*, 1-26.
- Giessner, S. (2011). Identity management key to successful mergers. *RSM Discovery-Management Knowledge*, *6*, 7-9.
- Gleibs, I. H., Täuber, S., Viki, G. T., & Giessner, S. R. (2013). When what we get is not what we want: The role of implemented versus desired merger patterns in support for mergers. *Social Psychology*, *44*, 177-190.
- Guerra, R., Rodrigues, D., Gaertner, S. L., Deegan, M., & António, R. (2016). The Functional and Identity Indispensability Scale (FIIS). *International Journal of Intercultural Relations*, *54*, 34-46. <https://doi.org/10.1016/j.ijintrel.2016.07.001>
- Haslam, S. A. (2004). *Psychology in organizations: The Social Identity Approach*. London: Sage Publications.
- Haslam, S. A., Reicher, S. D., & Platow, M. J. (2010). *The new psychology of leadership: Identity, influence and power*. London: Psychology Press.
- Hennis-Plasschaert, J.A. (2013, May). *Address by the Netherlands Minister of Defence on the occasion of the Berlin Strategy Conference*. Retrieved from: <https://www.government.nl/documents/speeches/2013/05/28/berlin-strategy-conference>
- Hogg, M. A. (2007). Uncertainty-identity theory. *Advances in Experimental Social Psychology*, *39*, 69-126.
- Larsson, R., & Finkelstein, S. (1999). Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization. *Organization Science*, *10*, 1-26.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, *13*, 103-123.
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, *84*, 123-136.

- Melkonian, T., Monin, P., & Noorderhaven, N. G. (2011). Distributive justice, procedural justice, exemplarity, and employees' willingness to cooperate in M&A integration processes: An analysis of the Air France-KLM merger. *Human Resource Management, 50*, 809-837.
- Moelker, R., Soeters, J.L., & Vom Hagen, U. (2006). Smooth and strained international military co-operation. In Vom Hagen U., Moelker, R., & Soeters, J.L. (Eds.), *Cultural Interoperability: Ten Years of Research into Cooperation in the First German-Netherlands Corps* (pp. 131–162). Strausberg, Germany: Sozialwissenschaftliches Institut der Bundeswehr.
- Paolini, S., Harwood, J., & Rubin, M. (2010). Negative intergroup contact makes group memberships salient: Explaining why intergroup conflict endures. *Personality and Social Psychology Bulletin, 36*, 1723-1738.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*, 751-783.
- Oosterhof, A., Van der Vegt, G. S., Van de Vliert, E., & Sanders, K. (2009). Valuing skill differences: Perceived skill complementarity and dyadic helping behavior in teams. *Group & Organization Management, 34*, 536-562.
- Ravasi, D., & Schultz, M. (2006). Responding to organizational identity threats: Exploring the role of organizational culture. *Academy of Management Journal, 49*, 433-458.
- Richter, A. W., Scully, J., & West, M. A. (2005). Intergroup conflict and intergroup effectiveness in organizations: Theory and scale development. *European Journal of Work and Organizational Psychology, 14*, 177-203.
- Seo, M. G., & Hill, N. S. (2005). Understanding the human side of merger and acquisition: An integrative framework. *The Journal of Applied Behavioral Science, 41*, 422-443.
- Strauss, J. P., Barrick, M. R., & Connerley, M. L. (2001). An investigation of personality similarity effects (relational and perceived) on peer and supervisor ratings and the role of familiarity and liking. *Journal of Occupational and Organizational Psychology, 74*, 637-657.
- Teerikangas, S. (2012). Dynamics of acquired firm pre-acquisition employee reactions. *Journal of Management, 38*, 599-639.
- Terry, D. J., Carey, C. J., & Callan, V. J. (2001). Employee adjustment to an organizational merger: An intergroup perspective. *Personality and Social Psychology Bulletin, 27*(3), 267-280.
- Turner-Zwinkels, F., van Zomeren, M., & Postmes, T. (2015). Politicization during the 2012 US presidential elections: Bridging the personal and the political through an identity content approach. *Personality and Social Psychology Bulletin, 41*, 433-445.
- Van Knippenberg, D., Van Knippenberg, B., Monden, L., & De Lima, F. (2002). Organizational identification after a merger: A social identity perspective. *British Journal of Social Psychology, 41*, 233-252.
- Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. *Annual Review of Psychology, 50*, 361-386.

# Appendix A

## Cultural interoperability (Section 4.1)

### Soldiers' motivation to collaborate with soldiers of the other nation

(similar to Melkonian et al., 2011)

Inwieweit treffen die folgenden Aussagen auf Sie zu?

1. Es ist mir wichtig, eine gute Zusammenarbeit zwischen deutschen und niederländischen Soldaten zu unterstützen. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. Ich bin gerne bereit, extra Zeit aufzuwenden um Herausforderungen, die durch Zusammenarbeit von deutschen und niederländischen Soldaten entstehen, zu bewältigen.
3. Wenn ein niederländischer Soldat, mit dem ich zusammenarbeite, zusätzliche Unterstützung braucht, biete ich diese gerne an.

In hoeverre zijn de volgende stellingen op u van toepassing?

1. Het is belangrijk voor mij om een goede samenwerking tussen Nederlandse en Duitse militairen te ondersteunen. (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. Ik ben graag bereid extra tijd te besteden om uitdagingen, die ontstaan door de samenwerking van Nederlandse en Duitse militairen, te overwinnen.
3. Als een Duitse militair, waarmee ik samenwerk, ondersteuning nodig heeft, dan bied ik dat graag aan.

### Soldiers' perceptions of effectivity of the collaboration with soldiers of the other nation

(adapted from Richter et al., 2005)

Inwieweit treffen die folgenden Aussagen auf Sie zu?

1. Meine Zusammenarbeit mit niederländischen Soldaten ist produktiv. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. Wenn ich mit niederländischen Soldaten zusammenarbeite, sind wir effektiv darin alltägliche Aufgaben zu bewältigen.
3. Wenn ich mit niederländischen Soldaten zusammenarbeite, sind wir effektiv darin Herausforderungen zu bewältigen.

In hoeverre zijn de volgende stellingen op u van toepassing?

1. Mijn samenwerking met Duitse militairen is productief. (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. Als ik met Duitse militairen samenwerk, dan kunnen we effectief omgaan met alledaagse taken.
3. Als ik met Duitse militairen samenwerk, dan kunnen we effectief omgaan met uitdagingen.

### Extra effort that soldiers experience because of the integration

(adapted from Richter et al., 2005)

Inwieweit treffen die folgenden Aussagen auf Sie zu?

1. Es kostet mich mehr Aufwand, wenn ich mit niederländischen Soldaten zusammenarbeite, als wenn ich mit deutschen Soldaten zusammenarbeite. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)

2. Durch die Zusammenarbeit mit niederländischen Soldaten habe ich nicht genügend Zeit für meine anderen Aufgaben.
3. Es gibt mehr Meinungsverschiedenheiten, wenn ich mit niederländischen Soldaten zusammenarbeite, als wenn ich mit deutschen Soldaten zusammenarbeite.
4. Es ist schwieriger, gemeinsam mit niederländischen Kollegen eine unerwartete Herausforderung zu bewältigen, als mit deutschen Kollegen.

In hoeverre zijn de volgende stellingen op u van toepassing?

1. Het kost meer moeite om met Duitse militairen samen te werken, dan wanneer ik met Nederlandse militairen samenwerk. (1 – Niet van toepassing, 2 – Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. Door de samenwerking met Duitse militairen heb ik niet genoeg tijd voor mijn andere taken.
3. Er zijn meer meningsverschillen als ik met Duitse militairen samenwerk, dan wanneer ik met Nederlandse militairen samenwerk.
4. Het is moeilijker om samen met Duitse collega's onverwachte uitdagingen te overwinnen, dan met Nederlandse collega's.

### **Attitudes regarding the integration and soldiers of the other nation (Section 4.2)**

#### Evaluation of the creation of an integrated division with German and Netherlands soldiers

1. Wie bewerten Sie die Errichtung der integrierten Division mit deutschen und niederländischen Soldaten? (1 - Negativ, 2 - Eher negativ, 3 - Neutral, 4 - Eher positiv, 5 - Positiv)
1. Hoe beoordeelt u de oprichting van de geïntegreerde divisie met Nederlandse en Duitse militairen? (1 - Negatief, 2 - Enigszins negatief, 3 - Neutraal, 4 - Enigszins positief, 5 - Positief)

#### Evaluation of the change caused by the integration

1. Wie bewerten Sie diese Veränderung in Ihrem Arbeitsumfeld? (1 - Negativ, 2 - Eher negativ, 3 - Neutral, 4 - Eher positiv, 5 - Positiv)
2. Wie bewerten Sie diese Veränderung in Ihrer Arbeit?
1. Hoe beoordeelt u deze verandering in uw werkomgeving? (1 - Negatief, 2 - Enigszins negatief, 3 - Neutraal, 4 - Enigszins positief, 5 - Positief)
2. Hoe beoordeelt u deze verandering in uw werk?

#### Trust in soldiers of the other nation

(adapted from Mayer & Davis, 1999)

Ihrer Meinung nach, inwieweit treffen die folgenden Stellungen über niederländische Soldaten zu?

1. Niederländische Soldaten haben viel Wissen über die Arbeit, die getan werden muss. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. Niederländische Soldaten sind dafür bekannt, dass sie erfolgreich sind in dem, was Sie tun.
3. Niederländische Soldaten berücksichtigen deutlich was für deutsche Soldaten wichtig ist.
4. Niederländische Soldaten tun ihr Bestes um deutschen Soldaten zu helfen.
5. Ich schätze die Prinzipien niederländischer Soldaten.
6. Niederländische Soldaten sind sehr darum bemüht, andere Personen gerecht zu behandeln.

Geef alstublieft aan in hoeverre de volgende stellingen over Duitse militairen, volgens u, van toepassing zijn:

1. Duitse militairen hebben veel kennis van het werk dat gedaan moet worden. (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. Duitse militairen staan erom bekend succesvol te zijn in de dingen die ze doen.
3. Duitse militairen letten echt op wat belangrijk is voor de Nederlandse militairen.
4. Duitse militairen doen hun best om Nederlandse militairen te helpen.
5. Ik waardeer de waarden van Duitse militairen.
6. Duitse militairen doen veel moeite om andere personen eerlijk te behandelen.

Common identification – feeling as one group with soldiers of the other nation

(adapted from Gaertner et al., 1993)

Wenn Sie an die deutschen und niederländischen Soldaten innerhalb der integrierten Division denken: Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

1. Trotz der verschiedenen Hintergründe fühlt es sich meistens an als ob wir alle zu einer Gruppe gehören. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. Obwohl Soldaten in der integrierten Division verschiedene Hintergründe haben, fühlt es sich an als ob wir alle an einem Strang ziehen.

Als u denkt aan de Nederlandse en Duitse militairen binnen de geïntegreerde divisie: In hoeverre zijn de volgende stellingen naar uw mening van toepassing?

1. Ondanks de verschillende achtergronden, voelt het meestal alsof wij gewoon één groep zijn. (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. In de geïntegreerde divisie, ondanks dat militairen verschillende achtergronden hebben, voelt het alsof we allemaal hetzelfde doel hebben.

Identification with the integrated division – feeling as part of and attaching importance to the integrated division

(Mael & Ashforth, 1992)

Inwieweit treffen die folgenden Aussagen auf Sie zu?

1. Wenn jemand die integrierte Division lobt, empfinde ich dies als persönliches Kompliment. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. Die Erfolge der integrierten Division sind meine Erfolge.
3. Ich bin sehr daran interessiert, was andere über die integrierte Division denken.

In hoeverre zijn de volgende stellingen op u van toepassing?

1. Als iemand de geïntegreerde divisie prijst, dan voelt dat als een persoonlijk compliment. (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. De successen van de geïntegreerde divisie voelen als mijn eigen successen.
3. Ik ben erg geïnteresseerd in wat anderen denken over de geïntegreerde divisie.



## Factors contributing to Cultural Interoperability

### Support of the motives of the integration (Section 4.3)

#### Opportunity – extent to which the integration is seen as offering opportunities for the military and individual careers and learning

Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

1. Die Integration bietet aus militärischer Sicht Chancen (z.B. neue Fähigkeiten, gestiegene Schlagkraft, höheres Ansehen). (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. Die Integration bietet für mich persönlich Chancen (z.B. Lernerfahrungen, Karrierechancen).

In hoeverre zijn de volgende stellingen naar uw mening van toepassing?

1. De integratie biedt uit militair oogpunt kansen (bv. nieuwe vaardigheden, gestegen slagkracht, verhoogd aanzien). (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. De integratie biedt mij kansen op persoonlijk vlak (bv. leerervaringen, carrièrekansen).

#### Pride – extent to which soldiers (of Panzerbataillon 414) recognize and take pride in the lighthouse character of their unit

Inwieweit treffen die folgenden Aussagen auf Sie zu?

1. Im Panzerbataillon 414 zu arbeiten, gibt mir das Gefühl an etwas Einzigartigem mitzuwirken. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. Ich bin stolz darauf, als Mitglied des Panzerbataillons 414 Teil der Integration „Projekt Taurus“ zu sein.
3. Mitglied des Panzerbataillons 414 zu sein, ist für mich eine besondere Erfahrung.
4. Ich sehe die Aufstellung des Panzerbataillons 414 mit deutschen und niederländischen Soldaten als Vorzeigeprojekt.

In hoeverre zijn de volgende stellingen op u van toepassing?

1. Om in het Panzerbataillon 414 te werken, geeft mij het gevoel aan iets unieks mee te werken. (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. Ik ben er trots op als lid van het Panzerbataillon 414 deel van de integratie "Project Taurus" te zijn.
3. Lid van het Panzerbataillon 414 te zijn, is voor mij een bijzondere ervaring.
4. Ik kijk naar de oprichting van het Panzerbataillons 414 met Nederlandse en Duitse soldaten als een voorbeeldproject.

### Fit of the Netherlands and German army (Section 4.4)

#### Contact prior to the integration

In der Summe, für welche Dauer haben Sie die folgenden Dinge bereits getan?

1. Vor Beginn der Integration mit niederländischen Soldaten zusammengearbeitet. (1 - Noch nie, 2 - Weniger als 6 Monate, 3 - 6-12 Monate, 4 - 1-3 Jahre, 5 - Mehr als 3 Jahre)

Samengevat, hoe lang of hoe vaak heeft u het volgende al gedaan?

1. Voorafgaand aan de integratie samengewerkt met Duitse militairen. (1 - Nog nooit, 2 - Minder dan 6 maanden, 3 - 6-12 maanden, 4 - 1-3 jaar, 5 - Meer dan 3 jaar)

Evaluation of contact with soldiers of the other nation

1. Wie bewerten Sie Ihren Kontakt mit niederländischen Soldaten? (1 - Negativ, 2 - Eher negativ, 3 - Neutral, 4 - Eher positiv, 5 - Positiv)
1. Hoe beoordeelt u uw contact met Duitse militairen? (1 - Negatief, 2 - Enigszins negatief, 3 - Neutraal, 4 - Enigszins positief, 5 - Positief)

Perceived similarity

(adapted from Van Knippenberg et al., 2002)

Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

1. Im Allgemeinen sind sich deutsche und niederländische Soldaten ähnlich. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. Die Arbeitsatmosphäre beim deutschen Heer ist wie die Arbeitsatmosphäre beim niederländischen Heer.
3. Die Überzeugungen und Prinzipien von deutschen Soldaten sind denen niederländischer Soldaten sehr ähnlich.

In hoeverre zijn de volgende stellingen naar uw mening van toepassing?

1. Over het algemeen lijken Nederlandse en Duitse militairen op elkaar. (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. De werksfeer in het Nederlandse leger is hetzelfde als de werksfeer in het Duitse leger.
3. De overtuigingen en principes van Nederlandse militairen lijken erg op die van Duitse militairen.

Cultural similarities and differences – assessed through self- and other-descriptions

(adapted from Turner-Zwinkels et al., 2015)

**Wie denken Sie über das Deutsche Heer und die Koninklijke Landmacht?**

**Hinweise zum Ausfüllen:**

Sie können Eigenschaften, Besonderheiten, Qualitäten, Prinzipien, Ziele und Aktivitäten dieser Soldaten aufschreiben.

Es gibt keine richtigen oder falschen Antworten. Schreiben Sie einfach zügig auf, was Ihnen als erstes in den Kopf kommt. Sie müssen nicht in alle fünf Fächer des Kästchens etwas schreiben (jedoch können Sie dies gerne tun).

**Bitte beschreiben Sie im Kästchen unterhalb Soldaten des Deutschen Heeres mit Ihren eigenen Worten.**

<b>1. Soldaten des Deutschen Heeres sind...</b>
•
•
•
•
•

Bitte beschreiben Sie im Kästchen unterhalb Soldaten des niederländischen Heeres (Koninklijke Landmacht) mit Ihren eigenen Worten.

<b>2. Soldaten des niederländischen Heeres sind...</b>
•
•
•
•
•

**Hoe denkt u over de Koninklijke Landmacht en het Deutsche Heer?**

**Instructies invullen tabel:**

U kunt eigenschappen, bijzonderheden, kwaliteiten, principes, doelen en activiteiten van deze militairen opschrijven.

Er zijn geen goede of foute antwoorden. Schrijf op wat het eerst in u opkomt. U hoeft niet alle vijf de velden in te vullen (maar dat mag uiteraard wel).

**Beschrijf alstublieft in de tabel hieronder militairen van de Koninklijke Landmacht in uw eigen woorden.**

<b>1. Militairen van de Koninklijke Landmacht zijn...</b>
•
•
•
•
•

**Beschrijf alstublieft hieronder militairen van het Duitse Leger (Deutsches Heer) in uw eigen woorden.**

<b>2. Militairen van het Duitse Leger...</b>
•
•
•
•
•

### Frequency of contact with soldiers of the other nation (Section 4.5)

1. Wie häufig haben Sie für Ihre Arbeit persönlich Kontakt mit niederländischen Soldaten? (1 - Nie, 2 - Weniger als einmal pro Monat, 3 - Ungefähr einmal pro Monat, 4 - Mehrmals pro Monat, 5 - Mehrmals pro Woche, 6 - Täglich)
1. Hoe vaak heeft u voor uw werk persoonlijk contact met Duitse militairen? (1 - Nooit, 2 – Minder dan één keer per maand, 3 – Ongeveer één keer per maand, 4 - Meermaals per maand, 5 - Meermaals per week, 6 - Dagelijks)

### Synergies (Section 4.6)

#### Perceived complementarity of knowledge and skills

(adapted from Oosterhof et al. 2009)

Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

1. Die Fähigkeiten deutscher und niederländischer Soldaten ergänzen einander. (1 – Trifft nicht zu, 2 – Trifft eher nicht zu, 3 – Teils/teils, 4 – Trifft eher zu, 5 – Trifft zu)
2. Deutsche und niederländische Soldaten können gemeinsam mehr erreichen als getrennt.
3. Niederländische Soldaten haben Erfahrungen in Bereichen in denen deutsche Soldaten weniger Erfahrungen haben.
4. Deutsche Soldaten haben Erfahrungen in Bereichen in denen niederländische Soldaten weniger Erfahrungen haben.
5. Deutsche und niederländische Soldaten gleichen die Schwächen des jeweils anderen aus.

In hoeverre zijn de volgende stellingen naar uw mening van toepassing?

1. De vaardigheden van Nederlandse en Duitse militairen vullen elkaar aan. (1 – Niet van toepassing, 2 – Enigszins niet van toepassing, 3 – Deels/Deels, 4 – Enigszins van toepassing, 5 – Van toepassing)
2. Nederlandse en Duitse militairen kunnen samen meer bereiken dan alleen.
3. Duitse militairen hebben ervaring met zaken waar Nederlandse militairen minder ervaring mee hebben.
4. Nederlandse militairen hebben ervaring met zaken waar Duitse militairen minder ervaring mee hebben.
5. Nederlandse en Duitse militairen compenseren voor elkaars zwaktes.

#### Unique contribution of soldiers' unit

(Guerra et al., 2016)

Inwieweit treffen die folgenden Aussagen Ihrer Meinung nach zu?

1. „Name Einheit des Teilnehmers“ liefert einen unerlässlichen Beitrag dazu, dass die integrierte Division gut funktioniert. (1 - Trifft nicht zu, 2 - Trifft eher nicht zu, 3 - Teils/teils, 4 - Trifft eher zu, 5 - Trifft zu)
2. „Name Einheit des Teilnehmers“ leistet einen unersetzbaren Beitrag zur Einsetzbarkeit der integrierten Division.
3. Ohne den Beitrag „Name Einheit des Teilnehmers“ wäre die integrierte Division militärisch deutlich schwächer.

In hoeverre zijn de volgende stellingen naar uw mening van toepassing?

1. „Naam eenheid participant“ levert een essentiële bijdrage aan het goed functioneren van de geïntegreerde divisie. (1 - Niet van toepassing, 2 - Enigszins niet van toepassing, 3 - Deels/Deels, 4 - Enigszins van toepassing, 5 - Van toepassing)
2. „Naam eenheid participant“ levert een essentiële bijdrage aan de operationele gereedheid van de geïntegreerde divisie.
3. Zonder de bijdrage van „naam eenheid participant“ zou de geïntegreerde divisie militair duidelijk zwakker zijn.

### **Demographics**

#### Age

1. Wie alt sind Sie? (1 - 17-25 Jahre, 2 - 26-30 Jahre, 3 - 31-35 Jahre, 4 - 36-45 Jahre, 5 - 46-55 Jahre, 6 - 56 Jahre und älter)
1. Hoe oud bent u? (1 - 17-25 jaar, 2 - 26-30 jaar, 3 - 31-35 jaar, 4 - 36-45 jaar, 5 - 46-55 jaar, 6 - 56 jaar en ouder)

#### Rank

1. Welcher Dienstgradgruppe gehören Sie an? (1- Mannschaften (bis Oberstabsgefreiter), 2- Unteroffiziere ohne Portepée (Unteroffizier und Stabsunteroffizier), 3 - Unteroffiziere mit Portepée (Feldwebel bis Oberstabsfeldwebel), 4 - Offiziere (Leutnant bis Stabshauptmann), 5 - Stabsoffiziere (Major bis Oberst), 6 – Generalität, 7 - Ich bin ziviler Mitarbeiter/zivile Mitarbeiterin)
1. Welke rang-groep heeft u? (1 - Manschappen – t/m Soldaat 1e klasse, 2- Korporaals – Korporaal t/m Korporaal 1e klasse, 3 - Onderofficieren – Sergeant, 4- Onderofficieren – Sergeant der 1e klasse t/m Adjudant-onderofficier, 5 - Officieren subaltern – Tweede Luitenant t/m Kapitein, 6 - Stafofficieren – Majoor t/m Kolonel, 7 – Generaals, 8 - Ik ben een civiel medewerker/medewerkster)