

ISITEP

D3.1.2 – NORWAY-SWEDEN AGREEMENT

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Publishable extended abstract

This document is a deliverable in the ISITEP (Inter Systems Interoperability for TETRA-TETRAPOL Networks) project. ISITEP will achieve operational interoperability among European first responders addressing the regulative, organizational, operational and technical level.

This document contains the definition of the first bilateral agreement in ISITEP between Norway and Sweden and have been developed by legal experts and subject matter experts in MSB and DNK in the role of network owners. The purpose of the agreement is to regulate the first ISI connection between two countries' emergency communication networks.

The Norway-Sweden agreement formalizes the operation of the interconnection between Nødnett and Rakel and also the cooperation between MSB and DNK by regulating the interconnection of the Norwegian and Swedish emergency communication networks, services included and the parties' responsibility and tasks associated with the implementation, operation and use of the cross border communication system ISI.

The attached agreement is an anonymized version of the agreement which have been sent to the Norwegian Ministry of Justice and Public Security and the Swedish Ministry of Justice for approval. The agreement will most likely be signed between the two countries at the cross-border multi agency event in November 2016.

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1 INTRODUCTION

This document is a deliverable in the ISITEP (Inter Systems Interoperability for TETRA-TETRAPOL Networks) project. ISITEP will achieve operational interoperability among European first responders addressing the regulative, organizational, operational and technical level.

This document contains the definition of the first bilateral agreement in ISITEP between Norway and Sweden. The agreement and the appendices have been developed by legal experts and subject matter experts in MSB and DNK. The purpose of the agreement is to regulate the first ISI connection between two countries' emergency communication networks. The agreement does not regulate cross-border operation among the public safety agencies¹.

The attached version is an anonymized version of the agreement which have been sent to the Norwegian Ministry of Justice and Public Security and the Swedish Ministry of Justice for approval. The agreement will most likely be signed between the two countries at the cross-border multi agency demonstration in November 2016².

¹ These types of agreements are described in ISITEP deliverables D21.1, D23.3 and D32.1

² The Norway-Sweden ISI solution will be demonstrated in a cross border exercise on November 16, 2016 (WP 71 Multi agency demo). Further descriptions of the technical setup, testing and the demonstration are described in ISITEP D71.1-5.

2 NORWAY-SWEDEN AGREEMENT

2.1 Background

The parties in the bilateral agreement between Norway-Sweden agreement are the DNK in the role of network owner in Norway (Nødnett) and the MSB as the network owner in Sweden (Rakel). The purpose of the agreement is to regulate operation and use of the ISI connection between the two countries' emergency communication networks as well as the cooperation between MSB and DNK.

The agreement and the appendices have been developed by legal experts and subject matter experts in MSB and DNK. The agreement does not regulate cross-border operations among the public safety agencies.

2.2 The structure of the agreement

The bilateral agreement between DNK and MSB consists of a main document and five appendices. The main document is kept on a general level, while the details are set out in the appendices covering technical descriptions of the interconnection, end user services, operations and fault management, the concept of governance and cost allocation. Changes to the agreement are most likely to occur for the items addressed in the appendices. The procedure for changing the main document are more complicated than changing the appendices. Upon leaving the main document to contain overriding provisions and legal basis for further regulation, it is easier to make changes in the details that are set out in the appendices.

Introductorily, the main document contains provisions regarding the contractual parties, the background for the agreement, definitions and how to interpret the agreement.

The agreement formalises the operation of the interconnection between Nødnett and Rakel and also the cooperation between MSB and DNK by regulating the interconnection of the Norwegian and Swedish emergency communication networks, services included and the parties' responsibility and tasks associated with the establishment and operation of the cross border communication system ISI.

2.3 Definitions in the agreement

The subsequent capitalized words and abbreviations shall have the following meaning in the Norway-Sweden agreement:

Actual Date Actual Date shall mean [Month, Date, Year] and is the date on which the ISI End user service is in operational use.

<i>Agreement</i>	Agreement shall mean this agreement regarding the Interconnection, operation and cooperation between Nødnett and Rakel, including Appendices, and any subsequent changes of this Agreement or its Appendices agreed by MSB and DNK.
<i>Appendix</i>	Appendix shall mean an appendix to this Agreement including its possible attachments.
<i>Effective Date</i>	Effective Date shall mean the date on which this Agreement is duly signed by both MSB and DNK, i.e. the date of the last signature.
<i>Interconnection</i>	Interconnection shall mean a functionality which enables exchange of traffic between Nødnett and Rakel, and that allows communication between ISI End users in both networks.
<i>ISI</i>	ISI shall mean the Inter System Interface that is integrated between Nødnett and Rakel.
<i>ISI End user(s)</i>	ISI End users shall mean subscribers of [network A] or [network B] who have a need for cross border collaboration.
<i>ISI End user service</i>	ISI End user service shall mean the service and functionalities provided under this Agreement, as specified in Appendix 2 ISI End user service.
[network A]	[network A] shall mean the Norwegian public safety communication system based on Tetra technology.
<i>PPDR organisations</i>	PPDR organisations shall mean Public Protection and Disaster Relief organisations.
[network B]	[network B] shall mean the Swedish public safety communication system based on Tetra technology.

2.4 Description of appendices

In order to provide Norwegian and Swedish PPDR organisations and users a predictable, reliable and secure cross border communication service the MSB and DNK undertakes to implement relevant agreements and obligations or requirements with ISI End users on one hand and the provider of technology and services on the other.

Both MSB and DNK undertake to keep their respective network and operation in accordance with Appendix 1 Interconnection and Appendix 3 Operations, and always consistent with best industry practice. The appendices have the following content:

Appendix 1 Interconnection

Technical status for the ISI Interconnection is set out in Appendix 1 Interconnection.

Appendix 2 ISI End user service

The functionalities provided by MSB and DNK to the ISI End users are set out in Appendix 2 ISI End user service.

MSB and DNK give each other the authority to approve subscribers with ISI approved radio terminals to become ISI End users and hence utilize ISI functionality. Procedures for such approval are set out in Appendix 2 ISI End user service.

Either MSB or DNK may suspend or terminate all or any of its functionalities to ISI End users in circumstances where it would suspend or terminate those functionalities to its own customers, including but not limited to when ISI End users violates the terms of service described in the Norway - Sweden ISI guidelines for cross border communication³.

Appendix 3 Operations

MSB and DNK are i.a. responsible for the operation and fault management in their respective network. This is set out in Appendix 3 Operations.

Appendix 4 Concept of governance

MSB and DNK agree on a concept of governance for the agreed technical solution and functionalities (ISI End user service), international fleet map⁴ as well as the administrative cooperation between the parties. The principles of governance are set out in Appendix 4 Concept of governance.

Appendix 5 Cost allocation and payment terms

MSB and DNK may be entitled to invoice each other for accrued costs for i.a. ISI End users' use of the other party's network and functionalities as well as for costs for transmission.

Regulation regarding payment terms and conditions are set out in Appendix 5 Cost allocation and payment terms.

³ The Norway-Sweden guidelines for cross border communication, is described in ISITEP D33.1 Handbook of PPDR procedures

⁴ The functional model developed between Norway and Sweden, including the international fleet map of single agency and multi agency talk groups, is described in ISITEP D 32.1 Functional model.

3 ANNEX

The Norway-Sweden agreement in the annex is an anonymized version of the agreement which have been sent to the Norwegian Ministry of Justice and Public Security and the Swedish Ministry of Justice for approval. The agreement will most likely be signed between the two countries at the cross-border multi agency event in November (WP 71).

Agreement

ISI cross border communication
[*country A*] - [*country B*]

Agreement between

[*network owner A*]

and

[*network owner B*]

regarding ISI cross border communication

Agreement

ISI cross border communication
[country A] - [country B]

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Agreement

ISI cross border communication
[country A] - [country B]

List of Appendices

Appendix 1	Interconnection
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Appendix 3	Operations
Appendix 4	Concept of governance
Appendix 5	Cost allocation and payment terms

Agreement

ISI cross border communication
[country A] - [country B]

1 The Parties

This Agreement is entered into between

[*Network owner A*] (**Name, registration number, address**) (hereinafter referred to as “[*network owner A*]”),

and

[*Network owner B*] (**Name, registration number, address**) (hereinafter referred to as “[*network owner B*]”),

hereinafter individually referred to as the “Party” and jointly referred to as the “Parties”.

2 Background, purpose and scope

[description of the Parties, their networks and operators]

[*Network owner A*] is the owner and administrator of [*network A*]. [*Network owner A*]’s contractual party for the delivery and operation of [*network A*] is [*network provider A*] (hereinafter referred to as “[*network provider A*]”).

[*Network owner B*], is the owner and administrator of [*network B*]. [*Network owner B*]’s contractual party for the operation of [*network B*] is, [*network provider B*] (hereinafter referred to as “[*network provider B*]”).

Users of [*network A*] and [*network B*] experience the need to be able to communicate with each other during operations and tasks in the border areas. In order to enable such communication through the other country’s respective TETRA system ([*network A*] and [*network B*]).

[*Description of the cooperation/project with network operators*], based on the ETSI ISI standard and the primary user licenses (TEA2) from Tetra Association.

This Agreement formalizes the operation of the interconnection between [*network A*] and [*network B*] and also the cooperation between the Parties by regulating the interconnection of the [*network A*] and [*network B*], services included and the Parties’ responsibility and tasks associated with the establishment and operation of the cross border communication system ISI.

Agreement

ISI cross border communication
[country A] - [country B]

3 Definitions and interpretations

3.1 Definitions

The following capitalized words and abbreviations shall have the meaning herein assigned to them unless the subject matter or context would obviously require otherwise.

<i>Actual Date</i>	Actual Date shall mean xx.xx.xxxx and is the date on which the ISI End user service is in operational use.
<i>Agreement</i>	Agreement shall mean this agreement regarding the Interconnection, operation and cooperation between [network A] and [network B], including Appendices, and any subsequent changes of this Agreement or its Appendices agreed by the Parties.
<i>Appendix</i>	Appendix shall mean an appendix to this Agreement including its possible attachments.
<i>Effective Date</i>	Effective Date shall mean the date on which this Agreement is duly signed by both Parties, i.e. the date of the last signature.
<i>Interconnection</i>	Interconnection shall mean a functionality which enables exchange of traffic between [network A] and [network B], and that allows communication between ISI End users in both networks.
<i>ISI</i>	ISI shall mean the Inter System Interface that is integrated between [network A] and [network B].
<i>ISI End user(s)</i>	ISI End users shall mean subscribers of [network A] or [network B] who have a need for cross border collaboration.
<i>ISI End user service</i>	ISI End user service shall mean the service and functionalities provided under this Agreement, as specified in Appendix 2 ISI End user service.
<i>[network A]</i>	[network A] shall mean the [country A]'s public safety communication system based on Tetra technology.
<i>PPDR organisations</i>	PPDR organisations shall mean Public Protection and Disaster Relief organisations.
<i>[network B]</i>	[network B] shall mean the [country B]'s public safety communication system based on Tetra technology.

Agreement

ISI cross border communication
[country A] - [country B]

3.2 Interpretations

For the purpose of this Agreement, the following principles of interpretation shall apply:

The provisions of this Agreement, the Appendices and any subsequent changes of this Agreement or its Appendices constitute the entire agreement between the Parties.

In any case of inconsistency or conflict between the provisions contained in this Agreement and the Appendices, this Agreement shall as a rule take precedence over the Appendices. However, in case of inconsistency or conflict between the provisions contained in this Agreement or any inconsistency or conflict between provisions contained in this Agreement and any of the Appendices the Parties shall use their best efforts to find a solution which comes as close to the original understanding and intention of the Parties as possible.

Referenced documents beyond those attached as Appendices are not part of this Agreement.

4 Appendices

In order to provide [country A] and [country B] PPDR organisations and users a predictable, reliable and secure cross border communication service the Parties hereby undertakes to implement relevant agreements and obligations or requirements with ISI End users on one hand and the provider of technology and services on the other.

Both Parties undertake to keep their respective network and operation in accordance with Appendix 1 Interconnection and Appendix 3 Operations, and always consistent with best industry practice.

4.1 Interconnection

Technical status for the ISI Interconnection is set out in Appendix 1 Interconnection.

4.2 ISI End user service

The functionalities provided by the Parties to the ISI End users are set out in Appendix 2 ISI End user service.

By this Agreement the Parties give each other the authority to approve subscribers with ISI approved radio terminals to become ISI End users and hence utilize ISI functionality. Procedures for such approval are set out in Appendix 2 ISI End user service.

Each Party may suspend or terminate all or any of its functionalities to ISI End users in circumstances where it would suspend or terminate those functionalities to its own customers, including but not limited to when ISI End users violates the terms of service described in the [country A]- [country B] ISI guidelines for cross border communication.

4.3 Operations

The Parties are i.a. responsible for the operation and fault management in their respective network as set out in Appendix 3 Operations.

Agreement

ISI cross border communication
[country A] - [country B]

4.4 Concept of governance

The Parties agree on a concept of governance for the agreed technical solution and functionalities (ISI End user service) as well as the administrative cooperation between the Parties. The principles of governance are set out in Appendix 4 Concept of governance.

4.5 Cost allocation and payment terms

The Parties may be entitled to invoice each other for accrued costs for i.a. ISI End users' use of the other Party's network and functionalities as well as for costs for transmission.

Further regulation regarding payment terms and conditions are set out in Appendix 5 Cost allocation and payment terms.

5 Confidentiality

The Parties are obliged to maintain secrecy on confidential information received from the other Party, including information about the other Party's administrative, economic or technical matters, other operating or business matters which for a cautious and loyal assessment should be understood is important to keep secret in the interests of the other Party's business.

“Confidential information” does not include information that is or becomes publicly known or generally available without a breach of this provision. Confidential information should only be used for the purpose it is received, and to the extent necessary for the implementation of this Agreement.

The duty of confidentiality does not preclude the Parties from submitting information to the prosecutor or other public authorities when this is imposed on them by or pursuant to statute.

Notwithstanding these provisions, constitutional law on public access to official documents, including rules on freedom of expression for officials is applicable.

These confidentiality provisions shall continue to apply for a period of three – 3 – years after this Agreement is terminated.

6 Security

The Parties are responsible for having secure information systems and networks and shall act in a timely and cooperative manner to prevent, detect and respond to security incidents.

The Parties agree to share information about threats and vulnerabilities, as appropriate, and implement procedures for rapid and effective cooperation to prevent, detect and respond to security incidents.

Each Party may suspend the Interconnection between the networks with immediate effect in circumstances where network integrity and security is in risk of being jeopardized.

Moreover, each Party may suspend the Interconnection between the networks with immediate effect in the event of a state of emergency, increased national state of readiness etc. whereas a relevant authority body may order such suspension.

Agreement

ISI cross border communication
[country A] - [country B]

The other Party shall be notified without undue delay about the reason for suspension. The Parties agree that the suspension shall be removed as soon as the reason for the suspension has been overcome.

7 Term and termination of this Agreement

This Agreement shall take effect on the Effective Date and shall continue in full force and effect until the Parties agree to replace it or terminate it.

This Agreement may be terminated by either Party with at least one – 1 – year written notice.

8 Assignment

The Parties' area of responsibility and tasks (in general or in particular regarding ISI cross border communication) may be changed by governmental or parliamentary decision. The Parties are entitled to assign or transfer this Agreement, including all rights and obligations, only if such decision is made.

Where a new governmental authority enters into this Agreement, the other Party shall, to the extent a modification, amendment or other change to this Agreement is required, in good faith negotiate necessary adaptations.

9 Changes and amendments to this Agreement and Appendices

The Parties recognize that changes to the Appendices may be necessary, due to i.a. technical development and experience from use.

Any requested changes and amendments to this Agreement and Appendices shall be duly justified.

Changes and amendments to this Agreement and Appendices shall be made in writing and signed by both Parties.

Authorized persons to sign the relevant changes and amendments are as follows:

	[network owner A]	[network owner B]
Changes and amendments to this Agreement		
Changes and amendments to the Appendices		

The changes and amendments shall be made in duplicate. Electronic signatures and signatures on scanned versions or PDF format are accepted, each of which counterpart shall be considered an original.

Agreement

ISI cross border communication
[country A] - [country B]

10 Dispute resolution

Any dispute, controversy or claim arising out of or in connection with this Agreement or Appendices, or the breach, termination or invalidity thereof, shall be finally settled by the Parties through negotiations in good faith and in accordance with the escalation procedure described in Appendix 4 Concept of governance.

If the Parties are unable to agree on how to solve a dispute, each Party may terminate this Agreement according to clause 7 of this Agreement.

11 Miscellaneous

This Agreement constitutes the Parties' complete understanding on all the issues that concern this Agreement and this Agreement supersedes all written or oral commitments and pledges prior to the same.

12 Notices

A Party is obliged to inform the other Party without undue delay, of any matter that have or may have impact on this Agreement.

All notices, claims and other notification to be given in accordance with the provisions of this Agreement shall be submitted in writing to a single point of contact designated by each Party, or as subsequently changed by notice to the other Party.

For [*network owner A*]:

Email:

Address:

For [*network owner B*]:

Email:

Address:

13 Counterparts and Date of execution

This Agreement is made in duplicate, one original for each Party.

Place/date/signature

Place/date/signature

[*network owner A*]

[*network owner B*]

Agreement

ISI cross border communication
[*country A*] - [*country B*]

ISI

Appendix 1

Interconnection

Agreement

ISI cross border communication
[country A] - [country B]

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Glossary and Definition of Terms in TETRA:
<http://www.tandcca.com/about/page/12023>

Agreement

ISI cross border communication
[country A] - [country B]

1. Prerequisites

This Appendix describes on a high level the Interconnection between [network A] and [network B].

This Appendix only describes the Interconnection at time of implementation of the Agreement. The procedure for amending this Appendix, due to future changes of the Interconnection, is described in Clause 9 of the Agreement.

The ISI that is integrated between [network A] and [network B] is standardized in the TCCA and ETSI. The functionalities are based on the existing phase three for inter system integration.

[To be filled in: The relevant authorities and network providers] have agreed at a general level (project agreement) on the conditions for cross border functionality, founded in the three ETSI standardized ISI phases. The cross border communication is to be deployed on available standards, no new developments. Since *[the providers]* may have different implementations of standards, the mutual common ground is used for deployment, to deliver the standardized ISI phases in both networks. The mentioned project agreement is referring to standards valid for ISI and is also covering common understandings between *[the relevant authorities and network providers]*.

1.1 ISI functionality

The ISI connection of the two national networks used by PPDR organisations in [country A] and [country B] enables radio communication to end user organisations in both countries. It is possible to communicate with their home provisioned Tetra radio terminals across the border and with the correct user rights also migrate into a visiting network during cross border incidents and missions.

Network Interconnection over the ISI link enables communication from any subscriber in the home network to any subscriber in the other network – with or without rights to migrate. This includes access to associated talk groups as well as individual calls, status messages and text messages (SDS) to users in the other interconnected network.

Migration to the other interconnected network for any user requires pre-provisioning in the visited network, an ISI subscription in the home network and an ISI adapted terminal – see Clause 1.1 of Appendix 2 ISI End user service, for further reference.

When migrating, a radio terminal deregisters from its home network and presents itself with the full ITSI to a base station of the visited network. If all user rights are confirmed, the radio terminal will send a migration location update and register in the visited network.

The security check is based on trust: if the radio terminal is allowed (authenticated) to use the services in the home network, the visited network will, after registration, grant the radio terminal the equal rights as in the home network. However, not all vendor specific services are available in the visited network.

Agreement

ISI cross border communication
[country A] - [country B]

2. Technology

2.1 Technical status of the ISI connection in the implementation phase

The ETSI standard for ISI implementation is specified for G.704/732 E1 connection. In the [country A]-[country B] Interconnection IP is also used. During the test phase a connection between the test and reference systems was made with E1 over IP without any Quality of Service.

2.1.1 Status of interconnected networks

[Network A]

[Network A] is at least in version [nnn].

[Network B]

[Network B] is at least in version [nnn].

2.2 Interconnection design

Connectivity between the two networks is set up between the [nnn]and [nnn].

G.704/732 E1s are deployed over leased private lines. IP transmission is deployed over TESTA-ng.

As per Effective Date of the Agreement, there are 30 timeslots provisioned over one G.704/732 E1(s) and zero timeslots provisioned over IP.

2.3 Security

2.3.1 Confidentiality and protection

All intra-network connectivity is provided by leased private lines. The default connections are provisioned over TESTA-ng.

The Trans European Services for Telematics between Administrations (TESTA) system is the private IP-based network of the European Union. TESTA is a telecommunications interconnection platform for secure information exchange between the European public administrations.

2.3.2 Resilience

All connections – both primary over TESTA-ng and fail-over E1s – are doubled and cross-connected for redundancy.

Agreement

ISI cross border communication
[*country A*] - [*country B*]

ISI

Appendix 2

ISI End user service

Agreement

ISI cross border communication
[country A] - [country B]

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Glossary and Definition of Terms in TETRA:

<http://www.tandcca.com/about/page/12023>

Agreement

ISI cross border communication
[country A] - [country B]

1. ISI End user service

1.1 General description

The ISI End user service will give a limited number of users in the PPDR organisation permission to visit (migrate to) the other network when using the international talk groups. Other users in the organisation will have permission to use international talk groups, but only in the home network.

1.2 ISI migration

ISI migration between two interconnected networks requires pre-provisioning of the TETRA terminal's ITSI in both networks. ISI migration also requires an ISI subscription in the home network and ISI adapted terminal software.

1.3 Functionalities

1.3.1 Group calls

A number of talk groups are permanently linked between [network A] and [network B]. These groups are referred to as the [international AB] talk groups. This set-up enables the use of the same groups in both countries, and all users of these talk groups can hear all other users in both countries.

The [international AB] talk groups are national talk groups to be used by participants in cross border cooperation at local, regional and national levels.

1.3.2 Individual calls

Individual calls between two TETRA terminals migrating into a visited network is possible (or from a home user to a visitor, or vice versa), but it is required to dial the entire ITSI number (ITSI = country code + network code + ISSI-number).

1.3.3 Group status messaging

The Interconnection of [network A] and [network B] supports transfer of status messages to talk groups. Status messages over an ISI linked talk group are transmitted to the dispatcher central managing the talk group.

1.3.4 Text messaging - SDS

The ISI End user service supports transfer of SDS messages (incl. unit alert/call out) to individual users, but not to talk groups.

1.3.5 Pre-emptive priority call (emergency call)

Both emergency calls and emergency status will work in talk groups when migrating. Preferred set-up would be to transfer these to the home dispatcher central. The exact functionality may be adapted to the individual organisation's needs and usage.

1.3.6 Geo-positioning

Geo-positioning for visiting users is not generally supported by the ISI End user service. Dispatchers in the home network will be able to see the position of their users when visiting in a foreign network.

Agreement

ISI cross border communication
[country A] - [country B]

2. Prerequisites

2.1 Equipment requirements

For the use of ISI migration any terminal must be upgraded with Air Interface Migration (AIM) ISI firmware and software that are approved in each national network where it is intended to be used, as well as programmed with international talk groups.

Whether a terminal is approved for use in a certain national network must be verified before the terminal is taken into use. The supplier of the terminal should be able to verify if the terminal is approved for the network(s) where it is intended to be used.

Each Party may have additional requirements beyond these for the use in the home network.

An overview of terminals certified in [country A]:
[URL A]

An overview of terminals certified in [country B]:
[URL B]

Further information on AIM ISI:

http://www.tandcca.com/Library/Documents/TETRA_Resources/Library/InterconnectingTETRAsystems.pdf

2.2 ISI End users

It is the Parties' discretion to decide which user organisations can become an ISI End user. The relevant criteria are set out in the subscription terms in the respective country.

In order for an organisation to be considered and approved as an ISI End user, it has to satisfy at least the following approval criteria:

- ISI End users must be registered subscribers of either [network A] or [network B].
- ISI End users must be identified as a party of a bilateral agreement permitting cross border operation.

Applications for the ISI End user service are to be submitted to the home network administrator.

2.3 Suspension and termination of ISI End user service

[Party A] and [party B] may suspend or terminate all or any of its functionalities to ISI End users in the circumstances where it would suspend or terminate those functionalities to its own customers, including but not limited to when ISI End users violates the terms of service described in the [country A] – [country B] ISI guidelines¹ for cross border communication in [network A] and [network B].

¹ See: ,,,

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[*country A*] - [*country B*]

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Appendix 3

Operations

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ISI cross border communication
[country A] - [country B]

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ISI cross border communication
[country A] - [country B]

1. Introduction

This Appendix describes how ISI End users are to report incidents and how the Parties are to collaborate in order to resolve an incident as quickly as possible. This Appendix also describes other technical operating conditions, such as safety, operational statistics, provisioning and escalation.

In order to handle radio licences, orders and fault management, [party A] must be registered as a user organisation in [network B], and [party B] must be registered as a user organisation in [network A].

2. Organisation of the operation

The operational organisations and collaboration between [party A] and [party B], their network operators and ISI End users are as follows:

[insert figure]

Figure 1 Organisation of the operation and collaboration between the parties

3. Fault management

3.1 Fault reporting from ISI End users

The ISI End users shall always contact their home operational organisation to report a fault. The home operational organisation thereafter contacts [party A]'s operations organisation, if the matter refers to a [country A] user, and [party B]'s operations organisation, if the matter refers to a [country B] user.

The Parties will follow up on reported faults according to internal procedures until assistance from the other Party is required.

3.2 Fault management between the countries

Fault management between the countries takes place between [party A]'s operations organisation and [network B]'s customer support.

Each Party can expect the same level of service as the other Party offers their own user organisations and end users.

The Parties are obliged to minimize the consequences of faults and to rapidly detect where the fault has occurred.

If the occurred fault affects the other Party, the cross border communication and/or Interconnection, the Party is obliged to inform the other Party about this. Further fault handling shall be reported by regular updates.

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[country A] - [country B]

If the fault is believed to have originated in the other Party's network, a fault report shall be sent to that Party.

For incidents reported between [party A]'s operations organisation and [network B]'s customer support, incident numbers (Ticket ID) are to be exchanged. Regular status updates are to be given according to each Party's internal procedures.

The other Party shall be notified as soon as possible when a fault has been corrected.

In the event of a fault in the connection between [network A] and [network B], [party A]'s operations organisation will report the fault to [telecom A] and [party B]'s customer support will report it to [telecom B].

[insert figure]

Figure 2 Interconnection fault handling

3.3 Severity levels

In order for the Parties' network operators to gain a better understanding of one another's severity levels for incidents in the event of fault management between the countries, the following conversion table can be used. [Party A] has X severity levels and [party B] has X severity levels.

[insert table]

Table 1 Severity Levels conversion table

3.4 Operational information and planned works – information exchange between the countries

The Parties are obliged to inform each other regarding planned work and current disruptions that may impact the ISI End user service or the Interconnection, by using the contact information in Clause 8 in this Appendix. If the planned work affects or may affect the ISI End user service or the Interconnection each Party may request the work to be postponed.

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ISI cross border communication
[country A] - [country B]

4. Provisioning

In order to enable [country A] ISI End users to migrate to [country B], [party A] is to contact [party B]'s customer support and place an order in the same way as [network B]'s other customers.

In order to enable [country B] ISI End users to migrate to [country A], [party B]'s customer support is to send a list of the terminals that are allowed to migrate and their corresponding user organisation to [party A].

Further information regarding provisioning is set out in the procedure "Ordering the ISI End user service". The procedure will be completed within Actual Date.

5. Security

5.1 Activation and deactivation of terminals

If there is a need to immediately deactivate a [country A] terminal located in [country B], [party A]'s network operator is to contact [party B]'s customer support.

If there is a need to immediately deactivate a [country B] terminal located in [country A], the organisation using the terminal is to contact [party B]'s customer support.

Deactivation is carried out 24/7/365.

Activation is carried out during normal business hours on weekdays.

5.2 Security incidents

Security incidents are handled by the Party in the country where the incident occurs. Security incidents that may be of importance to the other Party shall immediately be reported to [party A]'s network operator and to [party B]'s customer support.

5.3 Processing, storage and logging of traffic data

Traffic data (Call Data Records) are stored/not stored

6. Operational statistics

[Party A] and [party B] shall exchange operational statistics. The operational statistics are to be supplied at least two times per year in conjunction with the [ABI] collaboration group meeting according to Appendix 4 Concept of governance. The statistics shall as a minimum contain the following:

- Number of users
- Number of fault cases concerning ISI per month, both open and closed.

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ISI cross border communication
[country A] - [country B]

7. Escalation

Escalation in this Appendix shall mean notification to a higher administrative level.

If there is a need for escalation, this is to take place as follows:

Escalation scenario	[country A] escalates to	[country B] escalates to
Fault management	1.	1.
Provisioning/Orders	1.	

Table 2 Escalation information

8. Contact information

Contact information to [party A]'s network operator:

Tel:

E-mail:

Contact information to [party B]'s customer support:

Tel:

E-mail:

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Appendix 4

Concept of governance

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ISI cross border communication
[country A] - [country B]

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ISI cross border communication
[country A] - [country B]

1. Governance of the ISI solution between [network A] and [network B]

1.1 Background

[Party A] and [party B][Possible description of background, collaboration project etc.]

[Network A] and [network B] have been linked together through an interface that allows PPDR organisations in [country A] and [country B] to communicate within and between both networks in the event of accidents, emergencies and other incidents where resources from the neighbouring country are needed. [Network A] terminals can be used in [country B] and [network B] terminals can be used in [country A].

This Appendix describes a concept of governance of the solutions and guidelines for communication between the users of [network A], and [network B]. This Appendix also describes the governance organisations for collaboration.

1.2 Administrative period

The administrative period runs from Effective Date until further notice.

This Appendix may be changed or amended according to Clause 9 of the Agreement. A written annual report of the collaboration groups' work shall be submitted to the [party A] and the [party B] respectively. This report shall describe completed and planned work.

1.3 Governance organisations for collaboration between [party A], [party B] and user representatives

In order to maintain collaboration following the completion of the project, two collaboration groups are appointed:

- [ABI] Collaboration group between [party A] and [party B]
- [AB2] Collaboration group for user representatives, [party A] and [party B]

This Appendix describes each collaboration group as well as their role, function and task.

2. [ABI] - Collaboration group between [party A] and [party B]

2.1 Participants

The [ABI] collaboration group consists of representatives from [party A] and [party B], encompassing functions such as operations, maintenance, customer relations, development and methodology. The role as convener alternates between [party A] and [party B]. The convener is responsible for sending out invitations to the meeting, the agenda, keeping minutes and ensuring that any documents are sent out at least two weeks prior to the meeting. Two meetings per year, plus additional meetings when necessary, will be held for [ABI]. Dates for the group's meetings shall be planned on an annual basis. The participants cover their own costs. The authority that is acting as convener covers any cost for the meeting venue.

2.2 Goal and objectives of the collaboration group

The goal and objectives of the [ABI] collaboration group between [party A] and [party B] is to maintain collaboration between the two Parties and to monitor the ISI functionality that has been developed and delivered as well as the use of the ISI End user service, as described in

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the Agreement and appurtenant Appendices. The basic premise for collaboration is a dialogue for constant improvement.

The collaboration group's tasks includes i.a.:

- Following up on action points from previous meetings
- Reviewing planned activities for each authority that have an impact on the ISI
- Following up on operation, maintenance and functionality
- Following up on user and supplier issues
- Deciding on new customers for the ISI service/subscription
- Development requirements
- Risk and safety perspective
- Conducting an annual evaluation
- Appointing committees based on needs that arise
- Evaluating incidents and/or working procedures
- Altered cooperation procedures
- Managing the Agreement between [party A] and [party B], along with its Appendices
- Following up on escalated cases

2.3 Dispute resolution

In accordance with Clause 10 of the Agreement, disputes shall primarily be resolved through negotiations between the Parties. Disputes that have arisen may secondarily be referred to [ABI]. In the event of a referred dispute, [ABI] shall analyse the dispute and work to reach an agreed solution. In the event that [ABI] is unable to agree on how to resolve the dispute, [ABI] shall refer the dispute to the management of [party A] and [party B].

3. [AB2] - Collaboration group for user representatives, [party A] and [party B]

3.1 Participants

The [AB2] collaboration group consists of representatives from the ISI End users, as well as representatives from [party A] and [party B]. The role as convener alternates between [party A] and [party B]. The convener is responsible for sending out invitations to the meeting, the agenda, keeping minutes and ensuring that any documents are sent out at least two weeks prior to the meeting. Two meetings per year, plus additional meetings when necessary, will be held for [AB2]. Dates for the group's meetings shall be planned on an annual basis and be presented on the [party A] and [party B] websites. The authority that is acting as convener covers any cost for the meeting venue.

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3.2 Goal and objectives of the collaboration group

The goal and objectives of the [AB2] collaboration group is a dialogue regarding the follow-up on the use of the developed and delivered ISI functionality, as well as [country A] - [country B] ISI guidelines for cross border communication¹ in [network A] and [network B].

The collaboration group's tasks includes i.a.:

- Preparing received cases from [ABI] and from the ISI End users concerning requests and changes to the ISI functionality, talk group(s) and other changes needed on the basis of the users' altered collaboration needs.
- Administering [country A] - [country B] ISI guidelines for cross border communication in [network A] and [network B].
 - Analysing, preparing and proposing how changes can be implemented in coming revisions of the guidelines.
 - Ensuring that the guidelines support collaboration methods based on user needs.
 - When changes are requested, for example by new ISI End users, taking a holistic perspective into account based on the current collaboration structure and the methodology described in the [country A] - [country B] ISI guidelines for cross border communication in [network A] and [network B].
- To appoint committees for specific investigatory assignments, in accordance with decisions from [ABI] or [AB2].
- To ensure that the user requirements concerning the safety and confidentiality are fulfilled.

3.3 Administrative procedures for changes in talk groups and functionality

Decisions to change or supplement talk groups are made in accordance with the process described below. Decisions can be made at all the meetings during the year.

In urgent cases that require expedited processing, preparation and decision-making can take place between the collaboration group's regular meetings. Establishment and collaboration are carried out in other ways, for example via video/telephone conferencing.

All cases relating to requests for changes regarding talk groups covered by [country A] - [country B] ISI guidelines for cross border communication in [network A] and [network B] shall be sent in writing to [party A] or [party B] and be registered as incoming mail.

Cases for [AB2] shall contain the following information: Information about the originator, such as a contact person and contact information, a description of the requirements that have led to the proposed changes and in what respect these requirements are not provided for in the existing talk groups.

¹ See: [Guidelines for communication]

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[country A] - [country B]

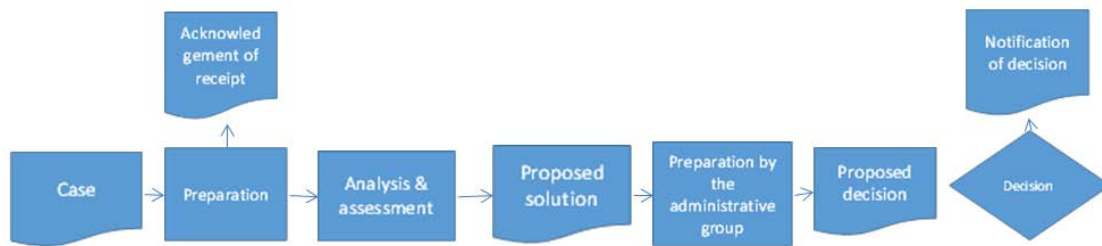


Figure 1 Administrative procedure for changes in talk groups and functionality

1. The case is received and prepared internally by [party A] and [party B]. A receipt shall be sent to the originator with a notification that the case is being prepared.
2. A proposed decision and an impact assessment for the decision are produced.
3. The proposed decision and the impact assessment are discussed to produce a final proposal in [AB2].
4. Decision by responsible manager.
5. Feedback on the decision is sent back to the originator of the case.

3.4 Revision of guidelines

Changes of the [country A] - [country B] ISI guidelines for cross border communication in [network A] and [network B] are made in conjunction with a decision in a case.



Figure 2 Administrative procedure for revision of guidelines

3.5 Communication

[AB2]'s meeting dates, decisions, etc. are to be communicated to the ISI End users and published on the websites of [network A] and [network B].

3.6 Publication of new documents

Changes of the [country A] - [country B] ISI guidelines for cross border communication in [network A] and [network B] and/or new talk groups shall be communicated via websites of [network A] and [network B] or through another established information channels.

The information shall explain:

- why the change has taken place,
- what is new and
- what it entails for the users.

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Appendix 5

Cost allocation and payment terms

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[country A] - [country B]

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ISI cross border communication
[country A] - [country B]

1. Costs related to the [country A]-[country B] ISI solution

1.1 Basis for cost allocation

Each Party shall pay their own costs in connection with the establishment of the ISI functionality in [network A] and [network B]. This includes the costs of establishing and operating the [country A]-[country B] ISI solution, transmission and registration of new ISI subscribers. Initially, subscribers shall not be charged extra payment for ISI subscription.

1.2 Assumptions

[Party A] and [party B] have agreed on some limitations in terms of the use of the [country A]-[country B] ISI functionality based on present technical limitations in one or both networks and financial terms such as licenses per network for ISI to connect to other networks in the future.

Migration and cross border communication is a national service. It is not limited to border regions or special “ports”.

The number of migrating radio terminals from each network is agreed to . This means that initially

- x [network A] terminals will be allowed the service of migration to [network B] and
- y [network B] terminals will be allowed the service of migration to [network A].

The number of simultaneously migrated terminals in each network is agreed to x . This means that initially

- x [network A] terminals can be migrated simultaneously to [network B] and
- y [network B] terminals can be migrated simultaneously to [network A].

These numbers and configurations will be monitored and evaluated through the governance model between [party A] and [party B] (ref. Appendix 4 Concept of governance), and will be subject for change as needed.

If there is a change to any of the above mentioned assumptions each Party may, according to Clause 9 of the Agreement, request renegotiation of the cost allocation principles.

2. Payment terms

When the Parties have agreed upon new cost allocation principles and hence have the right to charge each other, the following payments terms shall apply:

Any undisputed amount of an invoice shall be paid at the latest thirty (30) days upon receipt of the invoice.

Any claim a Party may have against the other Party due to the Party's breach of contract, or other claims arising from this Agreement, shall give the Party the right to withhold any payment to be made under this Agreement, to such an extent as is necessary in order to sufficiently secure a specific claim.

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[country A] - [country B]

In the event that payment is not made on due date, the invoicing Party shall be entitled to interests according to respectively [country A] (if [party A] issues the invoice) or [country B] (if [party B] issues the invoice) regulation on interests on late payments from due date until payment is made, cf. the Act relating to Interest on Overdue Payments,