Contract 22/00040
SSA-T - Appendix 3 Attachment 3
Integration description

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1 Integration description - National Reference Data Base

This database/system provides detailed caller/location-information to a few important national services - including health, fire and police. The context for the Communication-project (this project), is the people dialling the emergency number 113, and only these callers. The access and the information are strictly regulated and is not 'just' a source of information. The information from this system should be provided to the EMCC CAD.

The EMCC CAD discussions have not yet commenced, so detailed design must be discussed at a later stage. The information should be delivered to a third party system, via push/pull or queues. What we know so far, is that the communication system should integrate to NRDB to gather information for the incoming calls (people calling the emergency number 113) and provide this to a third party system - EMCC CAD. Further detailed design must be discussed.

Integration Point	National Reference Data Base (NRDB)
Integrator	Contractor will integrate
Documentation	
• *SSA-T - Appendix 3 - Attachment 5 - NRDB Emergency Call Positioning System - info and recommendations for Emergency Centres* • *SSA-T - Appendix 3 - Attachment 6 - NRDB Emergency Call Positioning System - Interface specification for Emergency Centres*	
Descriptions	
The NRDB Emergency Call Positioning System (ECPS) is based on guidelines given by the Norwegian Communications Authority (Nkom)[1] and provides two services to Emergency Response Centres in Norway: - Caller information. This service provides the name of the user and installation/billing address as well as other fixed data that the telecommunication providers can provide about their customers. - Mobile phone positioning. This service can be used to resolve the geographical position of a mobile terminal. The ECPS provides a SOAP-based Web Service to the emergency centres. The current WSDL can also be found here: https://liag.nrdb.no/20120124/services/EcpsService?wsdl The Web Service requires HTTPS and all transferred data will then be encrypted. Clients must authenticate using Basic Authentication (where username and password is set in the HTTP header).	

2 Integration description – Nødnett

This integrates into the communication system. The whole purpose of the communication system is to integrate the communication from the emergency network, public telephones, public emergency numbers (and more) and be the unifying front-end system.

Integration Point	Nødnett (The Norwegian Emergency Public Safety Radio Network)
Integrator	Contractor will integrate
Documentation	
Description will mainly be available for the Contractor directly from Motorola.	

[1] https://www.nkom.no/english

This requires that the Contractor is part of the Motorola partner program. An overall description will be provided by this project from DSB. Please see: SSA-T – Appendix 3 – Attachment 1 Nodnett ADP Process.pdf - Motorola API Licensing Process SSA-T – Appendix 3 – Attachment 2 Specification Nødnett - DSB Nødnett information

Descriptions	
Nødnett is a Tetra network provided by Motorola and currently utilizing Dimetra 9.1 This will provide the following interfaces: - DCS - IMW - MCADI - SDR	

3 Integration description – Telephony

Public telephone network needs to be integrated into the communication system. The whole purpose of the communication system is to integrate the communication from the emergency network, public telephones, public emergency numbers (and more) and be the unifying front-end system.

Integration Point	HDO IMS core network
Integrator	Contractor will integrate
Documentation	
• *SSA – T – Customer technical platform* • *SSA-T - Appendix 3 - Attachment 7 - SIP trunk specification*	
Descriptions	
The solution shall integrate to HDO IMS core network as described in documentation above	

4 Integration description - Authentication provider

The details concerning authentication and authorization is a matter of national interest. The principles and possibilities have been discussed, but the final design and implementation details will be decided together with the Supplier. .

Integration Point	National / local authentication provider
Integrator	Contractor will integrate
Documentation	
• SSA-T – Appendix 3 Customer technical platform – 4.4 Authentication and Authorization	
Descriptions	
To be decided The Solution will need to utilize one or more authentication providers. The current situation can be found in the documentation, but some partners are in the process of moving from AD to their own IdPs (ex. IBM/PingF) that support OIDC over OAuth..	

5 Integration description - EMCC CAD/GIS system

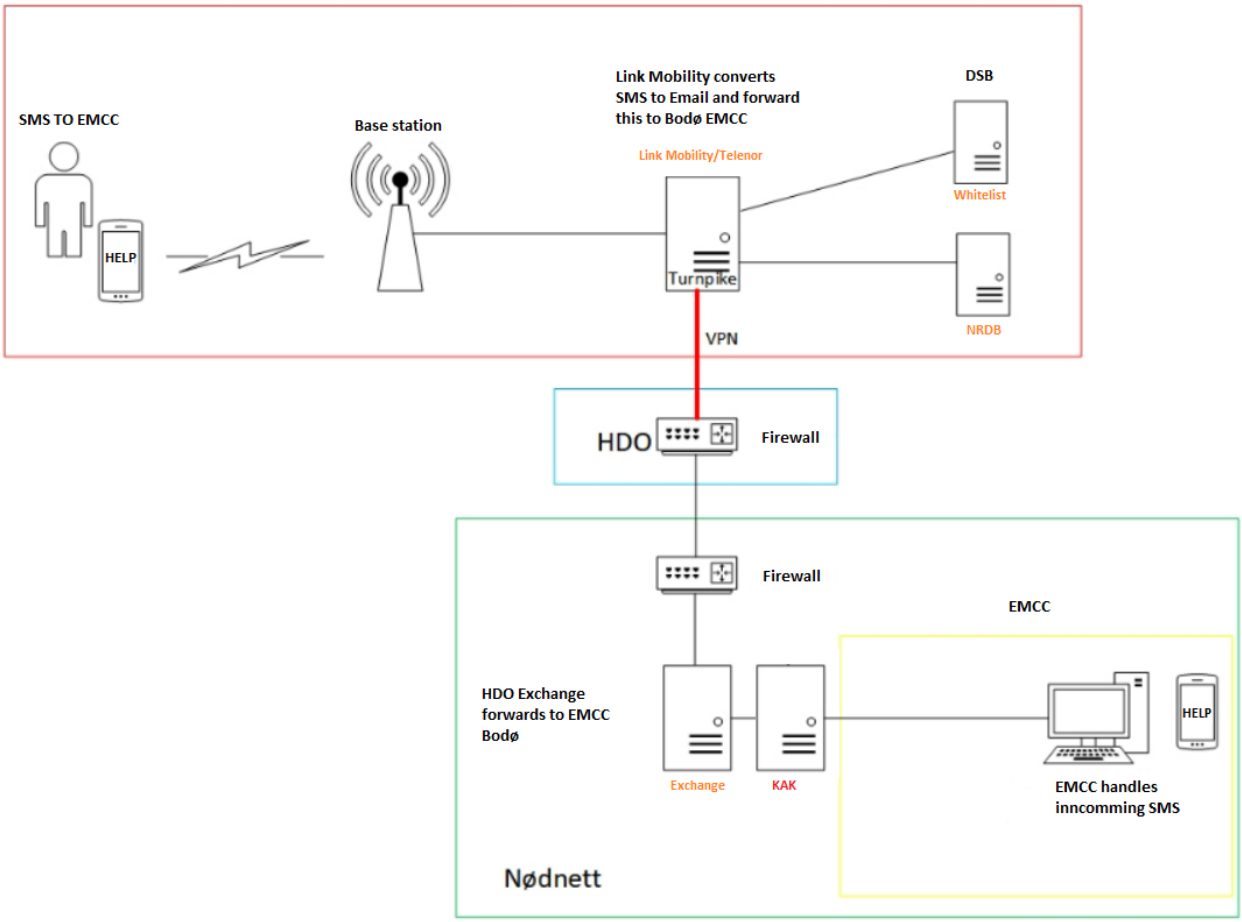
The EMCC CAD will connect to the communication system through the offered API. Like 'any other' third party systems, a GIS-system could also call the communication system.

Integration Point	Lucus Emergency. EMCC CAD/GIS system (And other third party systems)
Integrator	EMCC CAD/GIS provider will integrate
Documentation	
EMCCS CAD/GIS system will integrate toward communication solution using the provided API.	
Descriptions	
All EMCCs in Norway have procured a new CAD/GIS solution. Locus Emergency will be delivered by Locus. This system is still under development, and implementation is planned to start in March 2023. The solution is centralized and running at The Norwegian Health Network The main requirement from the EMCC-project is that all functions from the communication solution is available through the Contractors API. Collaboration between these projects is important to ensure a good workspace for the end user	

6 Integration description - NødSMS

In Norway, hearing disabled can contact the EMCC by sending SMS. Today the EMCC in Bodø answers these inquiries from all of Norway. The SMS is converted to an email by Link Mobility. In addition, they ensure that the telephone number is pre-registered against a whitelist and caller information and location is added. This email is sent to an Exchange at HDO, who will forward the inquiry to the contractor's solution.

Integration Point	HDO Exchange server
Integrator	Contractor will integrate
Documentation	
Descriptions	
The solution will receive predesigned emails from HDO Exchange server and present the inquiry for operators in EMCC Bodø	



7 Integration description - Video

Currently, there is one video solution in Norway that gives the opportunity for EMCCs, GPOC-Centrals and AEDs to see video from a member of the public where an incident has occurred. In near future there will be two products providing this functionality.

Both solutions are based on the members of the public receiving an URL by text message, this will then direct them to a request to accept the use of sending video from the camera on the mobile phone. When the request is accepted, a WebRTC stream is created from the initiator to the website of the solution.

The use of the solution is rapidly increasing and it has already been described positive benefits for use of the functionality.

Overview Integrations

API

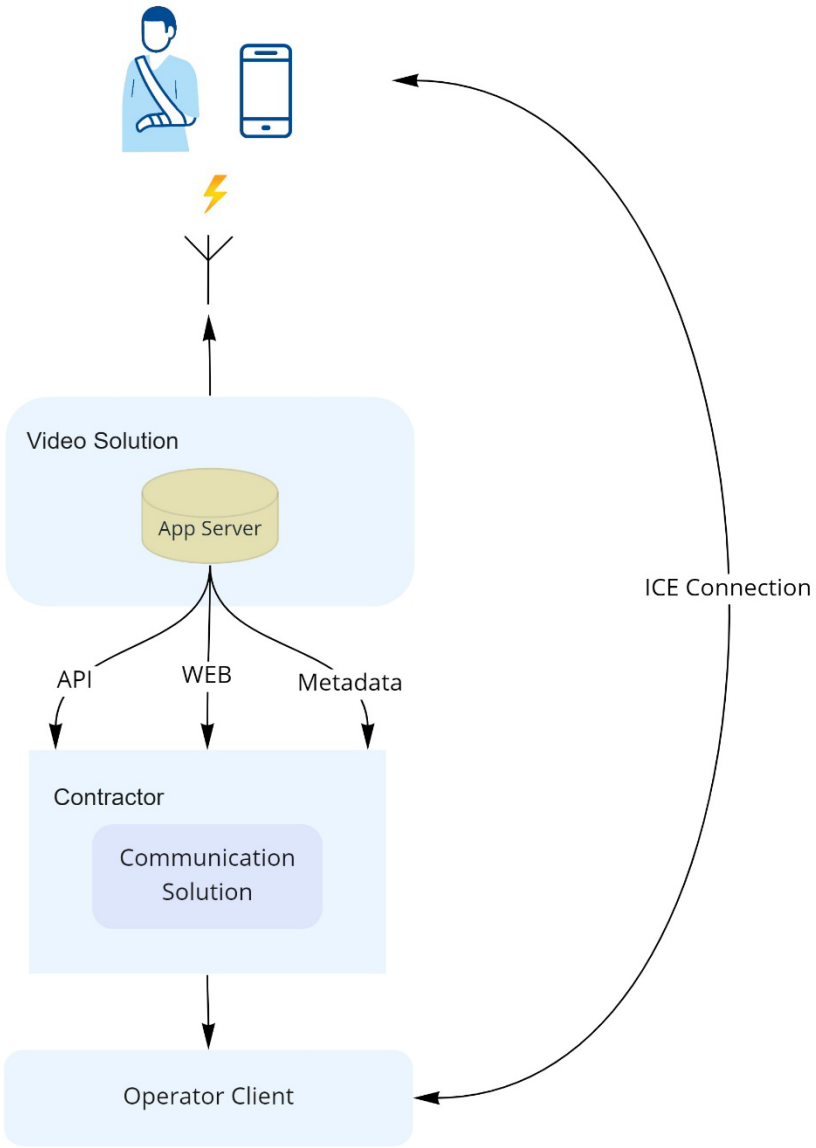
The API integration includes functions which will give the possibility to make the video solution embedded in the communication solution. Eg. Initiation of a videocall.

Web

Web integration integrates the webpage of the solution in the cimmunication solution

Metadata

Metadata integration is for statistic and logging purposes.



SNLA-Video

This is one of two video solutions developed to provide EMCCs, GPOC-Centrals and AEDs the possibility direct streaming from the public from an incident. This is currently the only solution in production.

Integration Point	SNLA-Video servers
Integrator	Contractor will integrate
Documentation	SSA-T - Appendix 3 - Attachment 10 - API-documentation SNLA-Streamer App
Descriptions	
The video stream uses the WebRTC protocol. Initiator sends a text message with URL to establish the stream. It is also possible for the initiator to invite other health personnel to evaluate the situation. The solution has no APIs and is implemented using iFrame. This could change in the future. The vendor is making a streamer app that has APIs. The attached documentation is for the app.	

Incendium

The second solution providing direct streaming to EMCCs, GPOC- Centrals and AEDs.

Integration Point	Incendium servers
Integrator	Contractor will integrate
Documentation	SSA-T - Appendix 3 - Attachment 9 - API- documentation Incendium
Descriptions	
This video solution is planned to be set into production in near future. The video stream uses the WebRTC protocol. Initiator sends a text message with URL to establish the stream. It is also possible for the initiator to invite another health personnel to evaluate the situation.	