General Information Package

Travel, Accommodation & General Information for the RECONASS Field Demonstration

ÄLVDALEN SWEDEN AUGUST 25, 2016





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1. EXECUTIVE SUMMARY OF THE RECONASS PROJECT



The RECONASS project involves (a) the development of a monitoring system for critical buildings that will provide a near real time reliable and continuously updated assessment of the structural condition of the monitored building after a disaster, (b) in case of spatially extended events, e.g., a strong earthquake, use the above assessment of the monitored facilities for the speedy calibration of satellite and oblique aerial photography of the damaged area and (c) provision of a post-crisis needs assessment tool in regards to construction damage and related needs that will be based on input from (a) and (b) above.

In order to validate all the developments by the project, a large demonstrator is foreseen to take place in Älvdalen, Sweden in which a 3 storey building of reinforced concrete has been fully instrumented by the RECONASS system and relevant prototypes. The test building will be subjected to massive blasts from its exterior (400 Kg of TNT) and its interior (20 KG of TNT) to demonstrate and evaluate the RECONASS system in a live experiment, as close as possible to realistic conditions. The RECONASS set up includes monitoring of the building using positioning tags, accelerometers, strain, temperature sensors and UAV imagery & the required communication means to transfer the in-building data towards the RECONASS disaster management platform (i.e. the PCCDN tool) where the assessment of the building will take place.



2. FIELD DEMONSTRATION INVITATION AND AGENDA



We would like to cordially invite you to attend the RECONASS field demonstration (exterior blast) in Älvdalen, Sweden on August 25, 2016. The registration form is available at the following link <u>http://www.reconass.eu/pilot</u>. Please note that - as the trial site is located at a military base - registration is absolutely required. The registration page will stay open until **August 15**, but of course we would like to have a view of the attendance as quickly as possible for logistic reasons.

The RECONASS demonstrator will showcase how the RECONASS system as whole assesses rapidly the structural condition of the monitored building after a disastrous event. Moreover, the behaviour of the individual prototypes will be put into stress (i.e. the sensors and their casings, the communication nodes, the structural assessment algorithms, the UAV assessment process, and the disaster management tool at the service of the end users that visualises the condition of the building post event).

If you are eager to find out what to expect from these demonstrations, then you can take a look at the video from the RECONASS Component Testing <u>https://www.youtube.com/watch?v=MgC8-Xduv-s</u>

You can also take a look at SHOX system at the following link http://www.shoxsolutions.com/

SHOX is a brand new structural health monitoring system, that uses state of the art ground and aerial sensor technology to remotely monitor any building.

The draft agenda of the demonstration day can be found in the attachment of this general information package.





3. VENUE INFORMATION

The RECONASS pilot location is near the Trängslet, Military Camp in Sweden (8km).

Nearby towns

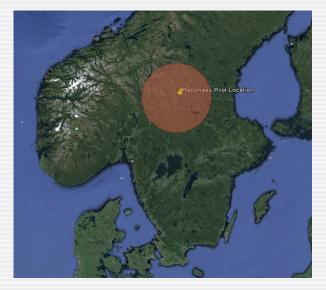
Älvdalen, approx. 2000 citizens, 30 km from Trängslet, Military Camp.
Mora, approx. 11000 citizens, 70 km from Trängslet, Military Camp



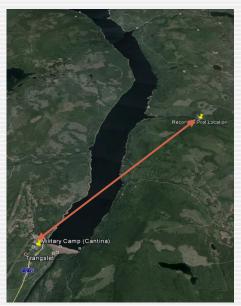


Mora

Älvdalen



RECONASS pilot location



Distance from Military Camp



4. TRAVEL INFORMATION

The RECONASS pilot location is near the Trängslet, Military Camp in Sweden (8km).

- A. Airports
- STOCKHOLM ARLANDA AIRPORT (http://www.swedavia.com/arlanda/#gref): The approximate driving distance between the Älvdalen to Stockholm-Arlanda Airport (ARN) is 350 km and the approximate driving time is 4 hours.
- MORA AIRPORT: is located approximately 72,3 km northwest of Falun and about 72,8 km northwest of Borlänge. The approximate driving distance between Älvdalen and Mora airport is 46,2 km and the approximate driving time is 40 minutes.
- **B. By public means of transport** (train and normal bus)
- Train (Mora)
- Bus (Mora Älvdalen)
- Car (Älvdalen Trängslet)
- Car (400 km from Stockholm)

For information about train ticket prices and train routes please visit: <u>https://www.sj.se/en/traffic-information.html</u>

For car rental information please visit: <u>https://www.europcar.com/location/sweden/mora</u>

C. Transportation for the participants

From Älvdalen your transportation back and forth to the test site will be handled by

the RECONASS consortium.

Meeting point Hotell Älvdalen at 09:00 am.



5. Proposed Accommodation

Please note that hotel reservations are the sole responsibility of the participants.

 Hotell Älvdalen (capacity 52 rooms), <u>http://www.hotellalvdalen.se/</u>



Hotell Fridhemsgatan

http://www.hotellimora.se/





- STF Älvdalen/Tre Björnar Hostel <u>https://www.swedishtouristassociation.com/facilities/stf-alvdalentre-bjornar-hostel/</u>
- Åsengården Stugby

http://asengarden.se/



As it will be a 1-day event it remains in visitor's preference to arrange for accommodation



6. SIGHTSEEING INFORMATION

Sweden is one of the best destinations if you love nature. It is characterised by virgin nature and dozens of natural wonders. The country is famous for its forested areas, lakes, national parks, rivers and even waterfalls. Nature lovers will enjoy to visit Töfsingdalen National Park or Njupeskär Waterfall, and experience a wide variety of outdoor activities.

Töfsingdalen National Park

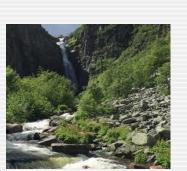
<u>Töfsingdalen National Park</u> is what every nature lover dream about; deserted open spaces with primary forests, rushing waters and small, glittering lakes. Töfsingdalen is the archetype of wilderness, with its inaccessible, barren, desolate and rugged boulder fields. Bears, wolverines and golden eagles thrive here. Since the terrain here can be virtually impassable in many places, it really isn't strange that the nature here is still quite untouched.

Töfsingdalen is surrounded by Långfjället nature reserve and next to the Rogen and Femundsmarka wilderness areas. Together they form <u>Gränslandet</u>, right by the Norwegian border. This area has high biological values. Because of the park's inaccessibility, it is one of the least visited national parks in Sweden, which makes it even more interesting for all kinds of wildlife enthusiasts.



Njupeskär Waterfall

This wonderful waterfall is situated in the Fulufjället National Park, on the NjupånRiver. Njupeskär waterfall is 93 meters and thus Sweden's highest. The water falls freely 70 meters. There are nice marked trails that take you up to Sweden's highest waterfall, trails through marshes, old forests and into one of the gorges found along Fulufjället. Here Njupeskär cuts into the rock and falls today 93 meters down to the bottom of the ravine.







7. CONTACT INFORMATION

For further information about the RECONASS demonstration please do not hesitate to contact:

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APPENDIX

DRAFT PILOT ANGENDA

VISITORS AREA Watch the pilot over UAV livestreaming

RECONASS TEST BUILDING Pilot building and detonation area

Bunker (for authorised RECONASS personnel)

Area for storing peripheral equipment during pilot execution (e.g. generator, van, etc.)

RECONASS Welcome presentation & Overview Timing: 10:30-11:15

The public will receive an overview of the work carried out within the context of the RECONASS project and the main results achieved. An operational briefing of the earthquake intervention demonstration will be given.

Tour to the Instrumented building and Explanations on the set up

Timing: 11:15 – 12:15

The visitors will have the opportunity to enter the Pilot building and observe the instrumentation choices. The RECOANSS technical partners will provide further details on the utilisation rationale and expected results after the pilot experiment.

Networking Lunch Timing:12:15:13:30

An on site lunch will be provided. During the lunch break, the public and the press representatives will have the opportunity to discuss all the details of the RECONASS Pilot experiment.

• Pilot Experiment Operations

Timing: 13:30 – 15:00

Execution of the detonation and return to the hot spot. The participants will be located at Visitors area (look at point 4 at the map) and will have the opportunity to watch the pilot over UAV live streaming.

 Participation to the hot evaluation & Presentation Timing: 15:00 – 16:00

QAs of the results obtained