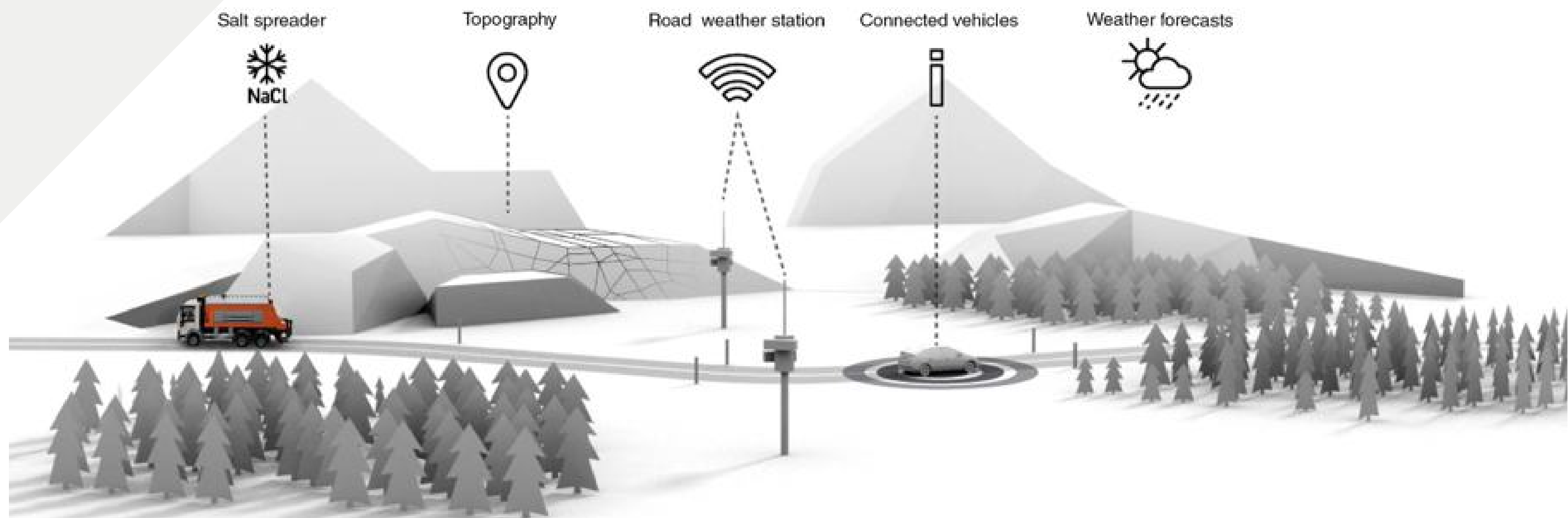


Implement Dynamic Dosage Successfully

How it works safely in your organization



Technical Track

DATA, SYSTEMS AND EQUIPMENT

-  Roads, classes and routes decided
Routes recorded for salt spreader
-  Salt spreader ability
Salt table decided

Treatment Policy Track

SITUATIONAL OPERATIONAL OPTIONS

-  When Confidence in forecast is High (Stable weather) → Directly from RSI forecast – no safety margin
Safety margin – 0,8 degrees Celsius on frost
-  When Confidence in forecast is low (Volatile weather situation) → “Never less than 5 grams”
Full dosage from salt table

Training Track

MONITORING (KLIMATOR)

- Weather Stations Installation and Service
- Road Status Information

TECHNICAL SET UP

Salt spreader functions and controller
EpoSat and EpoData

OPERATIONS (FOLLOW UP)

Project management



“ Dynamic dosage treatment for winter maintenance operators is a new, highly advanced technology. It brings new opportunities to how the road network is treated, thus has impact on set up of systems and equipment and treatment policies depending on how you wish to operate it.

The overall understanding of how it works and how the operation organization is trained for using it is crucial for harvesting the benefit it provides.

Checklist – Dynamic Dosage



WINTER ORGANIZATION ELEMENTS

- ☐ Management decision on dynamic dosing
Weather conditions and safety margins policy
- ☐ Assessment of impact on winter regulations
- ☐ Trained and instructed operations
management, winter watch and drivers
- ☐ Select routes/spreaders dynamic dosing
- ☐ Give permission for Epoke to share data from
distributors with Klimator



KLIMATOR ELEMENTS

- ☐ Climatologist report for clarification of supplementary
measurements for hyper local model
- ☐ Installation and data feed - IoT stations
- ☐ License for RSI
- ☐ License for Dynamic Dose API and each spreader
- Klimator:
- ☐ Set safety margin and minimum dose
- ☐ Customize salt table
- ☐ Establish API connection from RSI to user organization
- ☐ Set the user role "dynamic dose" for each ser who
needs this
- ☐ Training/certification of users



EPOKE ELEMENTS

Purchase:

- ☐ Epoke with EpoMaster X2 Remote Control
- ☐ License for E poSat & E poData
- ☐ SIM card for the spreader's data connection

To do list (Quick guide):

- ☐ Activate SIM card in Spreder
- ☐ Record Routes
- ☐ Update Remote & Unit 2.24
- ☐ Enable Dynamic in Remote Control
- ☐ Activate EpoSAt with dynamic remote control
- ☐ Send dynamic route from EpoData to spreader
- ☐ Ready to operate

System setup
before start

BEFORE CALL → CALL ROUTES

- ☐ Monitor the
weather
situation in RSI
- ☐ Select dynamic route variant in RSI – ONLY ROUTERS/
SPREADERS WITH THIS SETUP WILL BE AFFECTED. If the
selection is changed during the call, the salt spread will be
updated within 2 minutes. The selection is valid for 18
hours, after which dynamic dosing is set to the default
selection
- ☐ Call out the route in the usual system – the dose is now
given through RSI
- ☐ Call out other routes/spreaders in the usual way with
dosing in the usual system

→ OPERATE THE ROUTE

- ☐ Drivers on dynamic dose routes choose route. (There is
only one) Dosage is automatically retrieved from RSI
- ☐ Driver gets warning if no dynamic dosage is available,
can then switch to manual
- ☐ The controller can constantly see what is being spread
right now. The driver can always boost or switch to
manual operation (enter the dose manually)
- ☐ Drivers on other routes/spreaders select route and dose
manually in the usual way

→ END CALL

- ☐ The data collection shows the exact
amount of salt spread on each
segment
- ☐ Salt quantity per segment has been
continuously sent to RSI for salt
residue calculation

Operation of
AHEAD

