

Smart Automation living lab for process industry (SALLP)

A prioritized testbed project within the **Innovation partnership programme** financed by the Swedish government thru Vinnova and together with Swedish industry

SALLP: Smart Automation living lab for process industry



- 4 years project
- Total budget 40 MSEK (divided in two phases)
- RISE SICS Västerås AB (project coordinator), ABB AB, Ericsson, and BillerudKorsnäs (in phase 1)



Testbed for future process Industry solutions

**RI
SE**

ABB


ERICSSON


BILLERUDKORSNÄS

Pi!A
Process Industrial IT and Automation

Goal

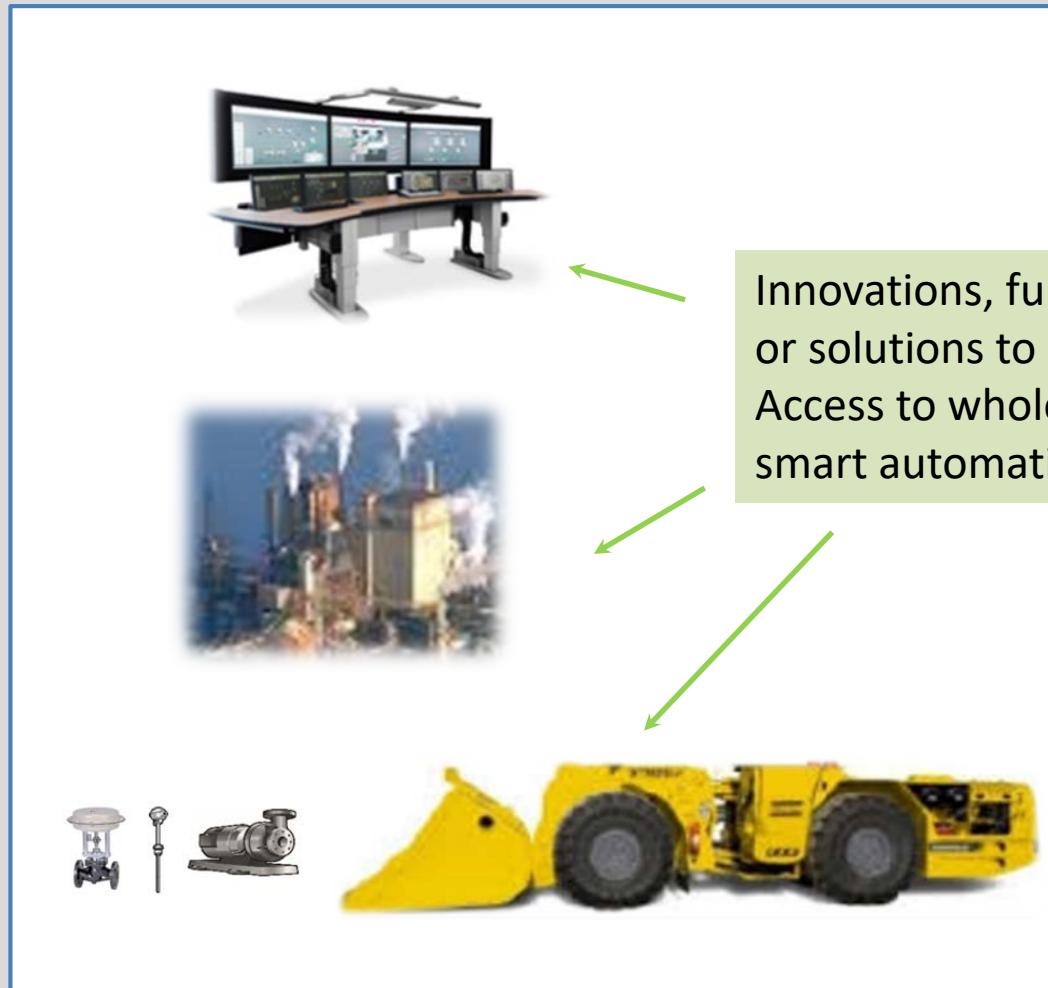
*Create an **innovative, long-termed, and accessible** arena for **process industry** that enables an easier and faster way to test new industrial Innovations, functions and solutions in an environment that mimics real production conditions.*



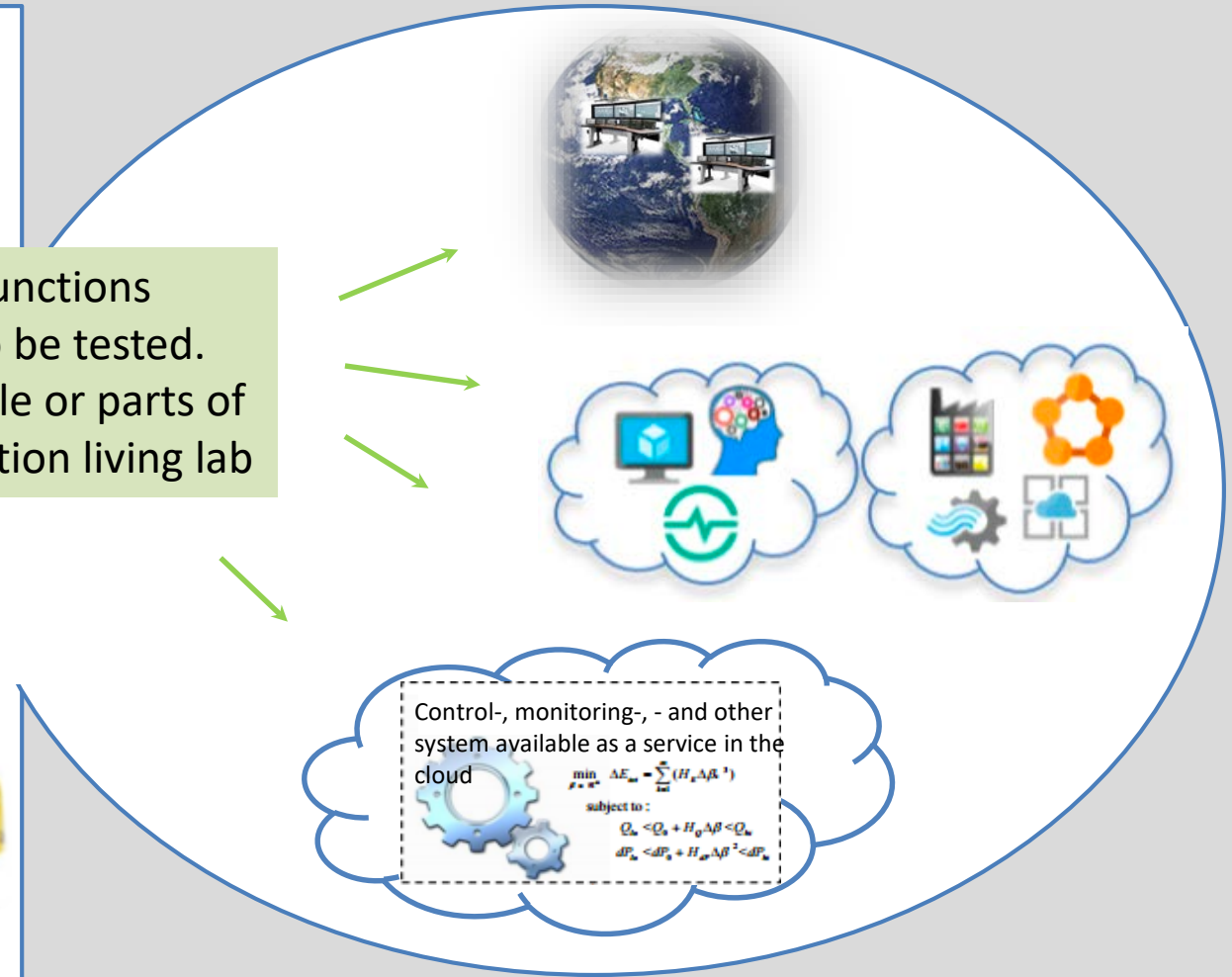
Smart automation living lab for process industry

Physical / real test environment

Virtual cloud based test system environment



Innovations, functions or solutions to be tested. Access to whole or parts of smart automation living lab



Control-, monitoring-, - and other system available as a service in the cloud

$$\min_{\beta} \Delta E_{tot} = \sum_{i=1}^n (H_i \Delta \beta^i)$$

subject to :

$$Q_{in} < Q_{in} + H_{in} \Delta \beta < Q_{out}$$
$$dP_{in} < dP_{in} + H_{in} \Delta \beta^2 < dP_{out}$$

Integrated test lab set up (example)

Physical places where the lab can be used, demonstrated and accessed.
Central, south and northern Sweden.

Central Sweden (Västerås) as the main centre for integration, configuration, maintenance and operation

Use case

Systems (subsystems) supplied as a service from e.g. SME

Connection to physical production site. With data from equipment and results presented for "site people" on e.g. the web

Some relevant test facilities at RISE and/or universities. With data "to and from".

Automation system

