Economical Green Hydrogen – Base Element and Energy Carrier of the Future

Gert Müller-Syring, DBI

H2-Netz Launch Technology and Research

Brussels, June 21, 2019

GEFÖRDERT VOM
Bundesministerium für Bildung und Forschung
zwanzig20 PARTNERSCHAFT FÜR INNOVATION

HYPOS HYDROGEN POWER STORAGE & SOLUTIONS EAST GERMANY

Project Characteristics

HYPOS H2-Netz

Project title:	Development of innovative concepts to link and supply a hydrogen consumer including distribution network structure and required safety technology
Associates:	DBI GUT Gas- und Umwelttechnik GmbH; MITNETZ GAS; REHAU Unlimited Polymer Solutions; TÜV SÜD Industrie Service; HTWK Hochschule für Technik, Wirtschaft und Kultur Leipzig
Project budget:	EUR 3.8M total budget (including all associates)
Project duration:	01/11/2016 – 31/12/2021 * * incl. term extension by 2 years
Site:	Chemical park Bitterfeld-Wolfen (Saxony-Anhalt)

HYPOS

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Technical Characteristics

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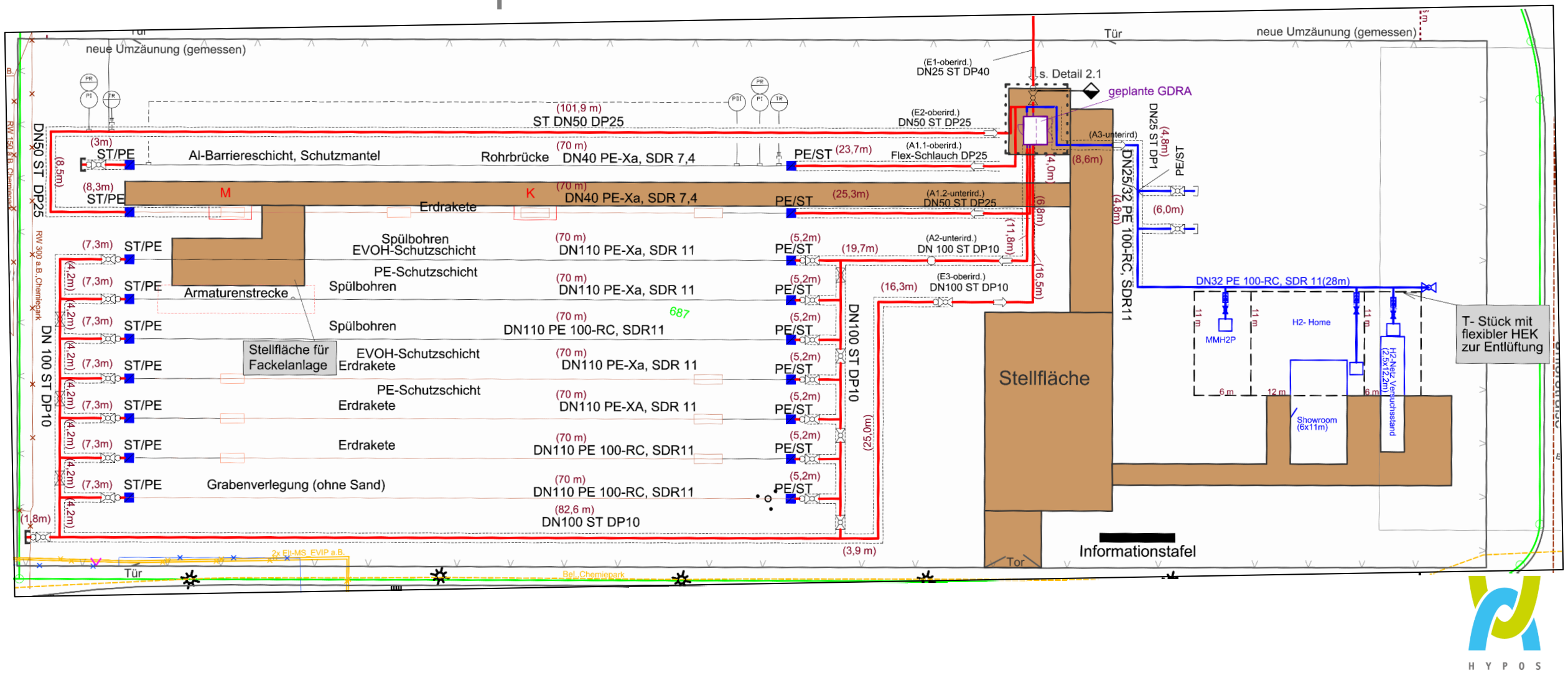
HYPOS HYDROGEN POWER STORAGE & SOLUTIONS EAST GERMANY

Technical concept



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Construction progress

04/2018 - 03/2019 Preparation of the property incl. erection of a fence, building ground tests, landscaping, foundation for GPRMS

HYPOS

Construction progress

02/05/2018	Official start of construction, laying of initial pipe segments via drilling rocket
08/2018 - 12/2018	Deployment GPRMS; laying of remaining pipe segments using various laying methods und materials; installation of in- and outlet pipes of GPRMS; pressure tests
04/2019	Delivery to end-consumer and implementation of overall network

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Research Focus

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HYPOS HYDROGEN POWER STORAGE & SOLUTIONS EAST GERMANY

H2-Netz Research Focus

Pressure regulator / Odorization

conception of a pressure regulator station / odorization facility and investigation of hydrogen tolerance/ hydrogen functionality

Distribution network incl. house service lines + II

qualification of plastic pipelines and suitability for modern laying methods

Experimental container

increase in knowledge about hydrogen tolerance/ hydrogen functionality

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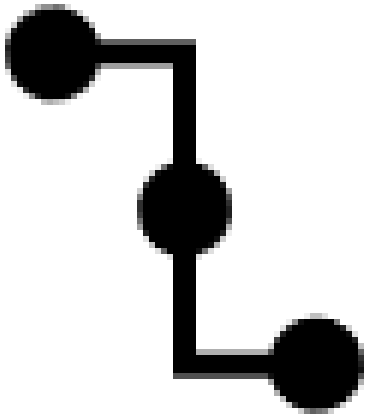
H2-Netz Research Focus

Safety

definition and qualification of safety technology regarding hydrogen distribution (operation, maintenance)

Optimization & Communication

economical and ecological assessment and optimization of the overall system incl. communication concepts



Simulation model

creation of a tool for the economical-ecological assessment of hydrogen distribution infrastructure

HYPOS

Label exchange **Hydrogen!**

HYPOS

Thank You for Your Attention

H Y P O S HYDROGEN POWER STORAGE & SOLUTIONS EAST GERMANY