



Digital Innovation Hubs meeting Agri-Food needs

DIH Agro Poland

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Lukasiewicz Research Network – Industrial Institute of Agricultural Engineering, Poland

SIEĆ BADAWCZA
ŁUKASIEWICZ





38 research
institutes



over 4500
scientists



6 research groups



Ignacy Łukasiewicz
pharmacist, inventor, philanthropist



business partners from
all over the world



ca. 8000
employees



1,3 bn PLN
income in 2018

DIH **Agro** Poland in detail

SIEĆ BADAWCZA
ŁUKASIEWICZ



Lukasiewicz Research Network - Industrial Institute of Agricultural Engineering

- Established in 1946
- Part of LUKASIEWICZ Research Network (38 institutes)
- Leading developer for machinery construction and innovative technologies for agro, food and forestry sector
- Coordinator of FIE#18 for SmartAgriHubs



Poznan Supercomputing and Networking Center

- Established in 1993 by the State Committee for Scientific Research
- Affiliated to the Institute of Bioorganic Chemistry PAS
- Leading applied ICT R&D center in Poland
 - 20+ R&D laboratories & groups (4 divisions)
- Leading operator of Polish e-Infrastructure
 - Operator of the Polish NREN "PIONIER"
 - Large HPC infrastructure
 - HPC infrastructure (2.3+ PFLOPS)
 - Cloud services provider (1500 nodes)
 - 2 data-centers
- Regional cluster co-leader of North East Europe for SmartAgriHubs

DIH Agro Poland in detail

SIEĆ BADAWCZA
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HPC⁴ Poland



NETIC⁴ TECH



institute of aviation
warsaw, since 1926

DIGITAL
INNOVATION HUBS

11

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INSTYTUT
TECHNOLOGII
DREWNA



Providing access to
services and technologies
for Smart Agriculture

IoT
HUB North Poland

EHUB
POMORSKI HUB INNOWACJI CYFROWYCH



PIAP
HUB
TECHNOLOGIES OF TOMORROW APPLIED TODAY



ktu
1922

SmartIC Infra
R&D tuumikartistu ja koostöö
projekt

LKA

LITHUANIAN
ROBOTICS
ASSOCIATION

HUB4AGRI
Digital Innovation Hub for Agriculture

SaMASZ

METAL-FACH

IGRO
TECHNOLOGY

Spomasz

BURY

UNIA

PRONAR

BOMET

pomot
CHOJNA

Allflex
Livestock Intelligence

Metal
Tech

DATALOGISK

AGRO SHOW

EX
P

FREEDOM
GROW
RAISING IT STANDARDS

KEMR
KRUKOWIAK

STIGA

POM
AUGUSTÓW

ITC
INOWACJSKO TECHNOŁOGIJSKI GROZD
INNOVATION TECHNOLOGY CLUSTER

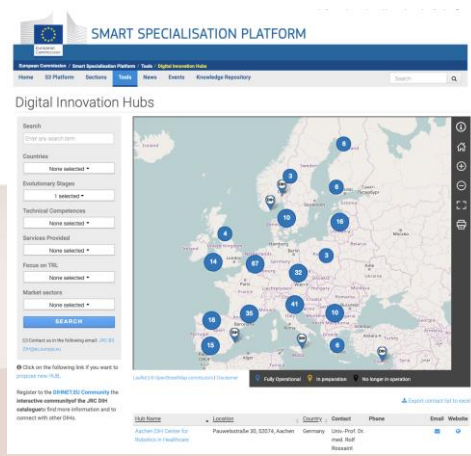
ARiMR

Service/data transfer

Service/data recipient

European **Landscape** of agro DIHs

Agile, and demand-driven, Digital Innovation Hubs in Europe are sustainable innovation ecosystems, not just a gateway to services.



DIH Service Needs

A group of organisations with complementary expertise and a non-profit objective, offering a set of services to companies – especially SMEs (incl. Start-ups) and mid-caps – to support their digital transformation through a one-stop-shop.

Test before invest

- Experimentation with hardware and software
- Demonstration facilities
- Piloting

Support to find investments

- Feasibility studies
- Develop business plans
- Incubation and acceleration programmes

DIHs as one-stop-shops

Skills and training

- Train the trainer programmes
- Bootcamps
- Traineeships
- Exchange of training materials

Innovation ecosystem and networking

- Marketplaces
- Collaborations
- Brokerage

DIH Agro Poland: Objectives

- Offer **access** to **e-Infrastructure resources** to support **pilots**, prototyping, scaling-up, design, performance verification, testing, demonstration, etc.
- Facilitate **partnerships** with **SMEs/industry, innovation clusters, accelerators** and **investors** that stimulate **innovation**
- Increase **visibility** on a **European/International level**
- Provide **business coaching** and training to “accelerate” **market uptake** and **exploitation** results
- Support access to **funding/grants**
- Develop **long-term business** relationships

DIH Agro Poland: Services



Ecosystem building, scouting, brokerage, networking



Concept validation and prototyping



Incubator/accelerator support



Mentoring



Visioning and Strategy Development for Businesses



Testing and validation



Voice of the customer, product consortia



Education and skills Development



Collaborative Researches

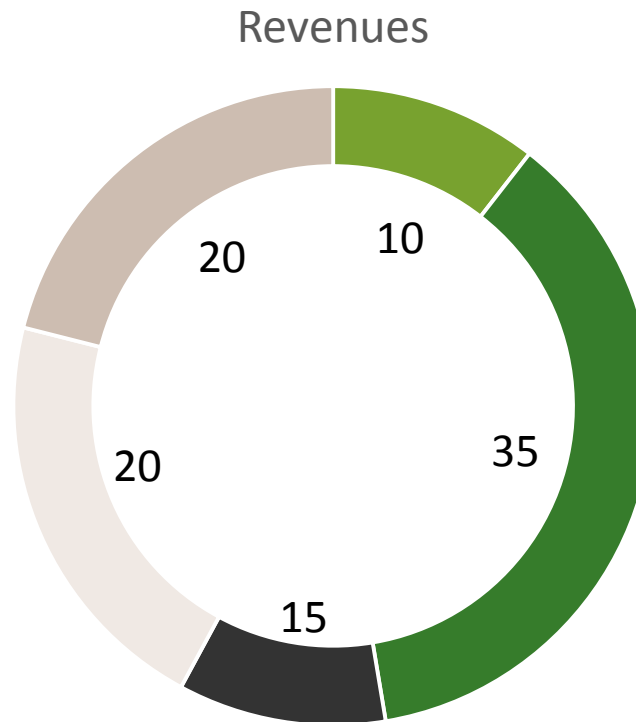


Digital Maturity Assessment



Access to Funding and Investor Readiness Services

DIH Agro Poland: Revenues and funding opportunities



■ Fees ■ Projects ■ Own resources ■ Indirect commercialization ■ Public



DIH Agro Poland: Collaboration Topics



Food
sector

Health
Safety

Autonomous
machines

Funding
support

New business
models

Innovation in
Agriculture

Disease/pest
prediction

DIH Agro
collaboration

Efficient
processes

Technology
transfer

AI
Software
Sensors

Fertilizers

European **Collaboration** of **agro** DIHs and SMEs

Agile, and demand-driven, Digital Innovation Hubs in Europe are sustainable innovation ecosystems, not just a gateway to services.



European Collaboration of agro DIHs and SMEs



SMART
AGRI
HUBS

North East
Europe

FLAGSHIP INNOVATION EXPERIMENTS

5



FIE#16



FIE#17



FIE#18



FIE#19



FIE#20

European Collaboration of agro DIHs and SMEs



North East
Europe

FLAGSHIP INNOVATION EXPERIMENTS

5



E-services Utilising
Drones for Quantity Buyer

Online Decision Support
System Fertiliser
Optimisation

Autonomous Greenhouses –
smart micro farming and
smart large-scale production

Bee Monitoring and
Behaviour Prediction

Smart Groundwater and
Weather Sensors

Why should industry engage the DIH Agro?

- Obtain more than what you can just get with a credit card
 - Diverse services; Exploit research data; Expertise; Wide visibility; Funding opportunities
- Single point for discovery, request and access of services and expertise
- Collaborate on a European and international scale
- Promote services (agreeing to the 'rules of participation')
- Participant in procurement framework

Are you already in a Digital Innovation Hub?

EC wants to create a pan-European 'network' of DIHs, we should work together

Still have questions or want further info?

Contact us directly:

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