



# MIRRI – The Microbial Resource Research Infrastructure

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# Background

## MIRRI

- builds a **pan-European distributed research infrastructure** that provides facilitated **access** to high quality **microorganisms**, their derivatives, associated **data** and **services** for research, development and application
- connects public resource centres with researchers and policy makers as well as other stakeholders to **deliver material and services** more effectively and efficiently to **meet the needs of innovation** in biotechnology



# Background

During the **Preparatory Phase** (2012-2015) the MIRRI consortium expanded to **16 Partners** (dark orange) and **27 Collaborating Parties** (light orange), representing 19 countries throughout Europe.

In the current **Transition Phase**, the MIRRI consortium aims to establish MIRRI as an European Research Infrastructure Consortium (ERIC) under EU law.

Full operability of MIRRI-ERIC is envisaged for 2020.



# Background

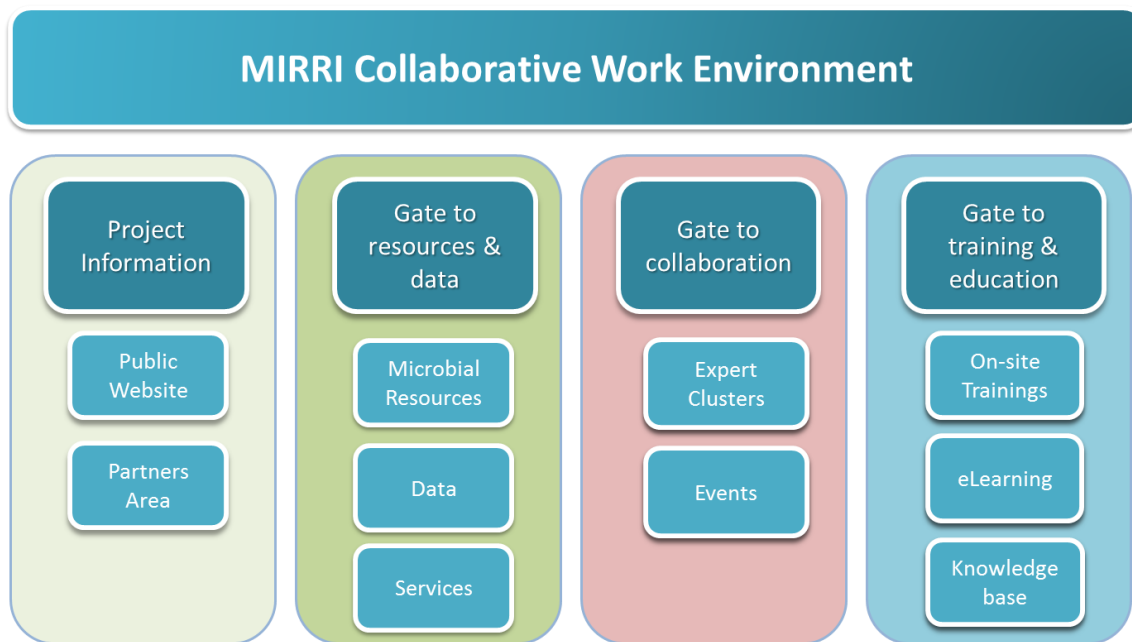
*Full operability of MIRRI-ERIC is envisaged for 2020.*

**BUT:** Full operability of individual Partners is already available!

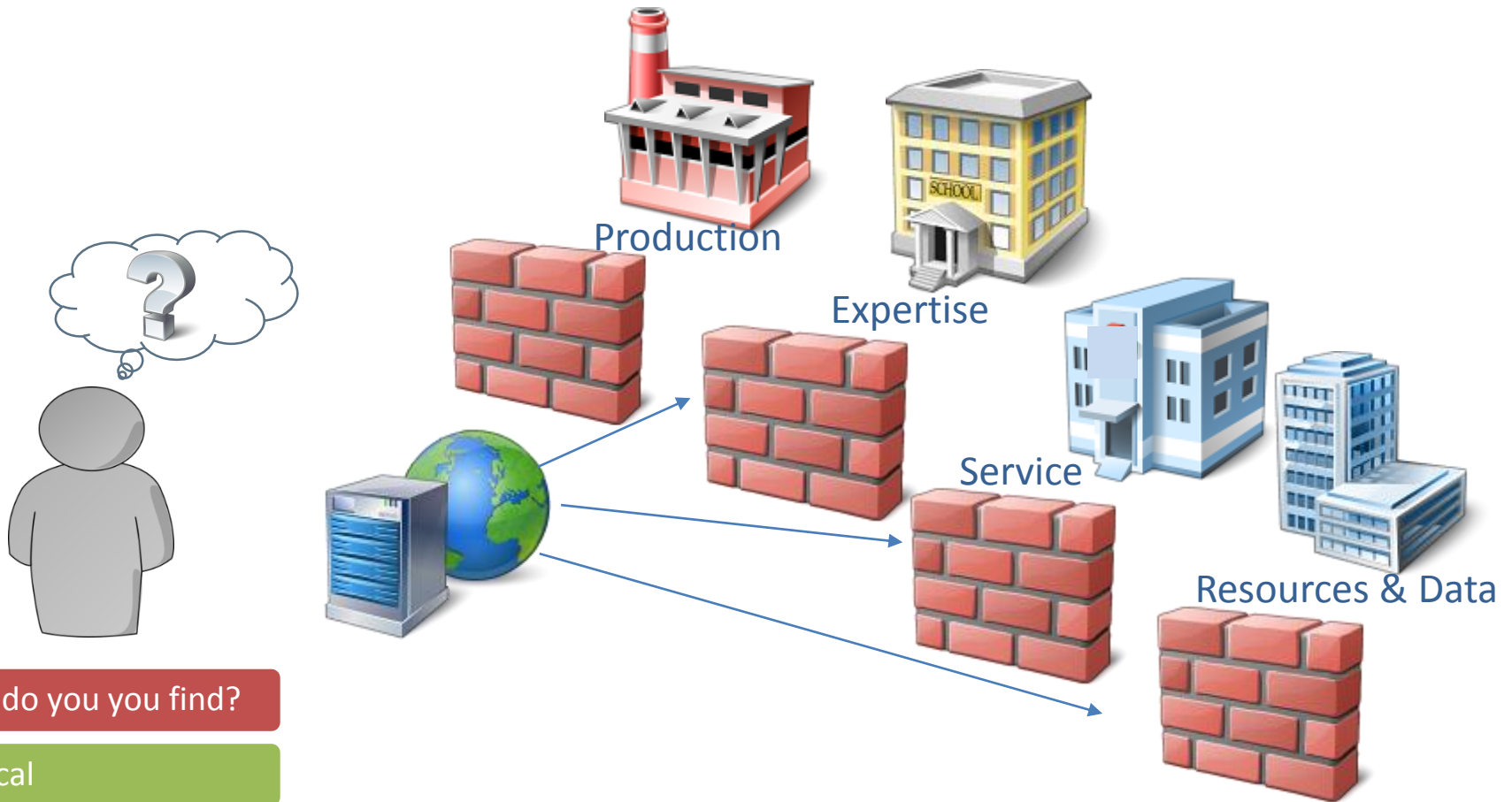
- ➔ **legally compliant access to > 450,000 microbial resources** [*i.e. bacteria (including cyanobacteria), archaea, fungi, yeasts, plant viruses, bacteriophages and their isolated DNA as well as human, animal and plant cell cultures*], associated data and related expertise ([www.mirri.org/user-service](http://www.mirri.org/user-service))
  
- ➔ access to **> 60 different services** [ranging from isolation and preservation to identification and molecular characterisation as well as, contract research and training (e.g. quality management, ABS compliance)] ([www.mirri.org/user-service](http://www.mirri.org/user-service))
  
- ➔ long lasting **experience in collaboration** with bio-industry

# How does MIRRI contribute to innovation?

MIRRI translates its distributed network structure into a virtual and dynamic **Collaborative Work Environment (CWE)** in which partners, users and other stakeholders of MIRRI share knowledge, exchange experience and collaborate to achieve common goals in research and development.



# CWE – implementing visibility



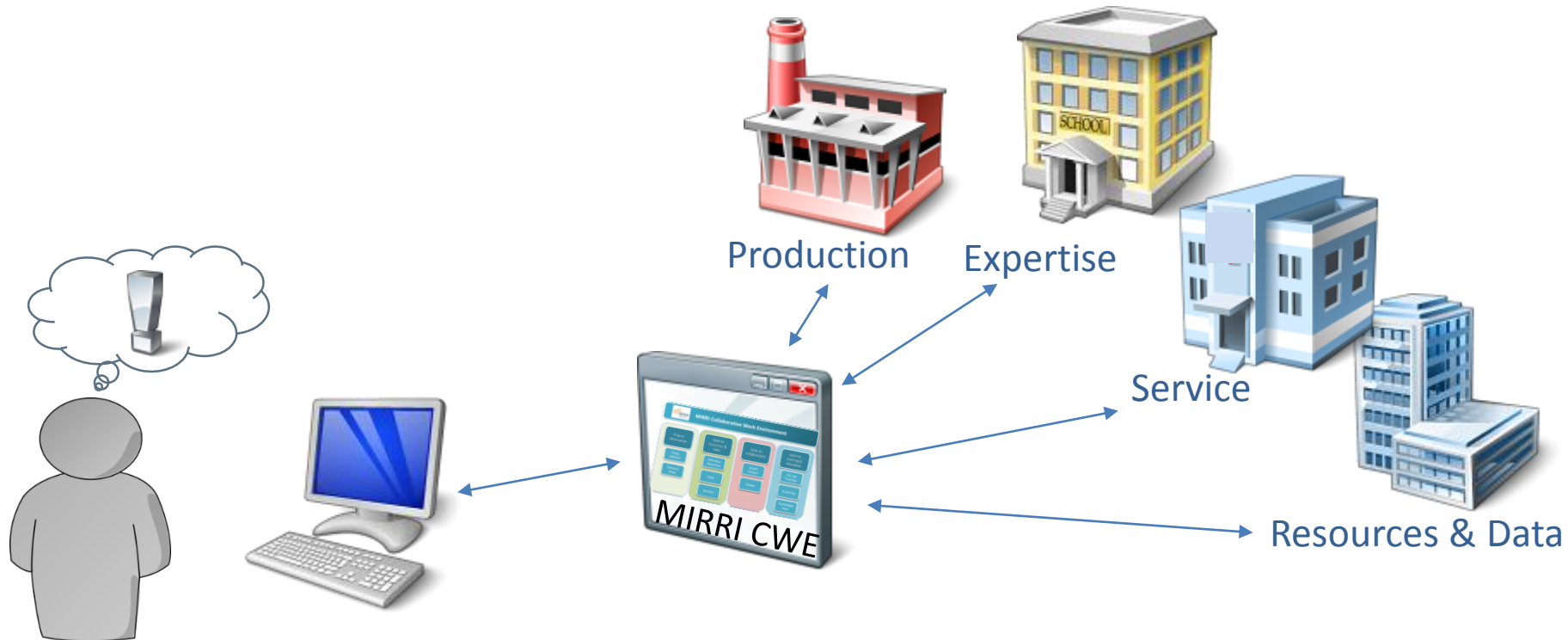
Where do you you find?

Biological

- Material
- Services
- Data
- Communication
- Exchange
- Expertise
- Production Facilities ...



# CWE – a culture of transparency and empowerment



Where do you find?

Biological

- Material
- Services
- Data
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## MIRRI CWE

Combines the whole world of biological resources and know-how on one platform

- easily creates a massive surplus in transparency for scientists worldwide
- saves valuable time in research
- broadens the horizon and creates new ideas and products

# CWE – the innovation platform

## Example:

Company „NatureChem Ltd.“ wants to establish microbiology-based optimization strategies to turn plant polymers (cellulose, pectin, rubber etc.) into fine chemicals.



**Questions/search:** organisms, their physiology and genetic potential, literature, expert knowledge, training (mutagenesis), services (contract researchers), single strain vs. community actions, chemistry, polymer physics, logistics

**Intention:** safe time in research, add value to developments, gain innovation

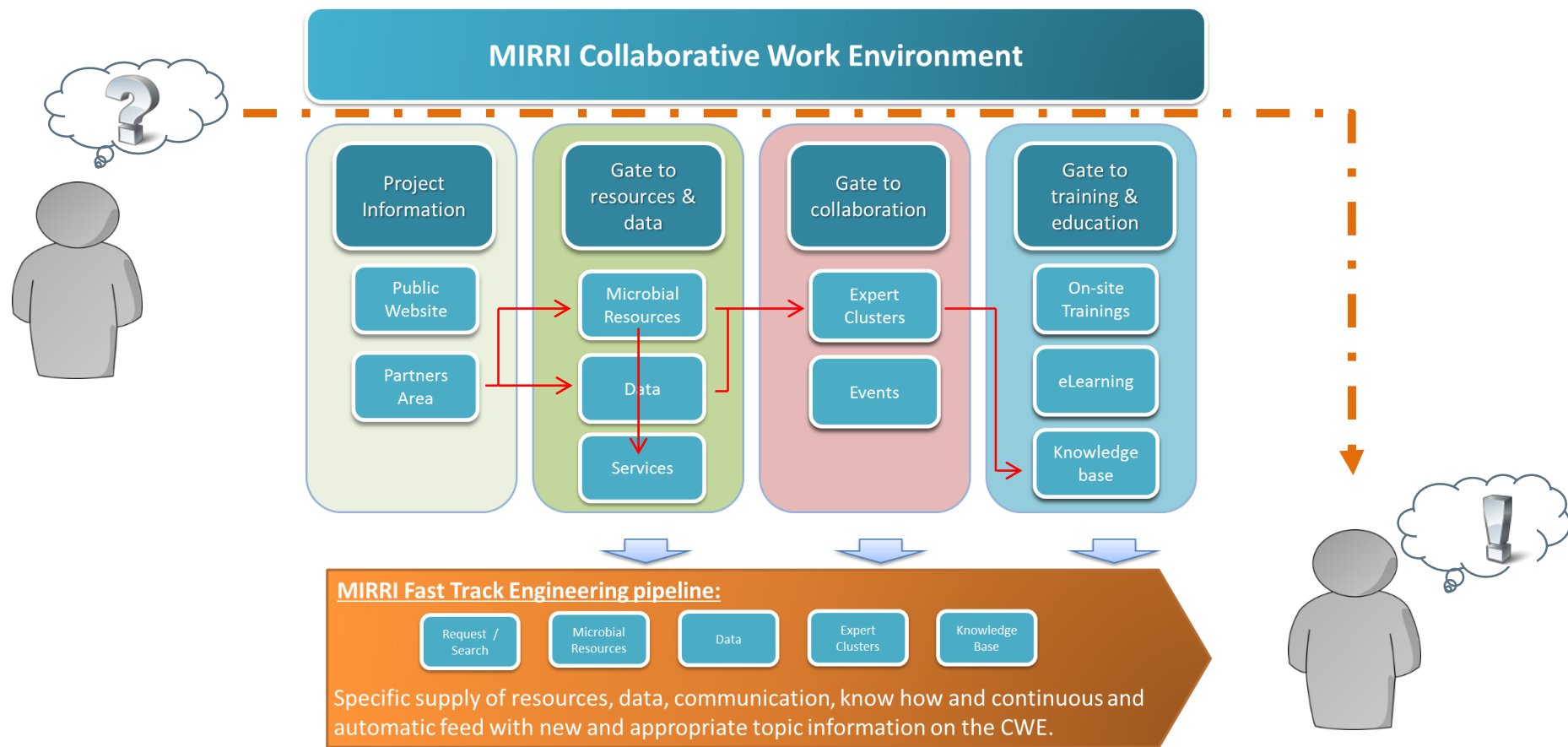


# CWE – from knowledge to innovation

## CWE Service: “MIRRI Fast Track Engineering Pipeline”

An engineering track will be opened collecting all **information and services**.

This pipeline will be used under **protected and secured** conditions by the requesting company.



## MIRRI Fast Track Engineering Pipeline

Request /  
Search

Microbial  
Resources

Data

Expert  
Clusters

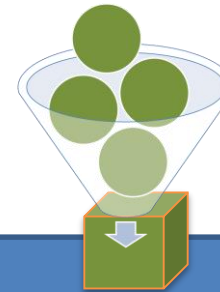
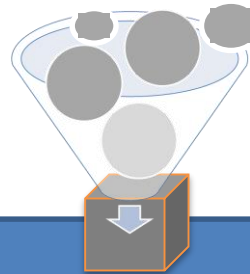
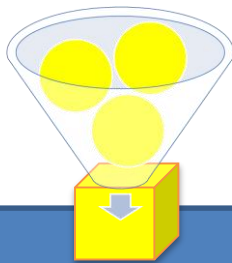
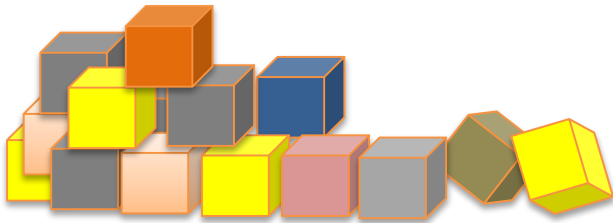
Knowledge  
Base

### Fast Track Engineering Pipelines:

Bringing convolutes of information and knowledge to a systematic and exploitable level = transformation process from knowledge to innovation = added value

for Bioscience and Biotechnology

- ✓ saving time
- ✓ extending potentials
- ✓ gaining time to market
- ✓ ... ..



Open a personal and secured pipeline

Perform search and get access to literature, resources, contacts, latest research results, application know-how, experts, ...

Open new expert cluster and discuss tasks, targets and know-how

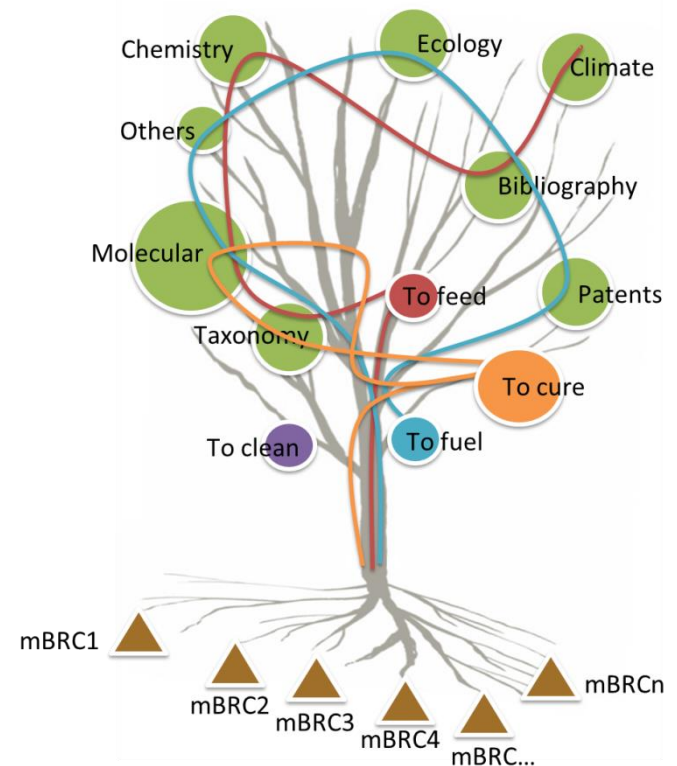
Get automatic feed on new content concerning the pipeline topic, e.g. literature, experts, products, collaboration with other RIs or initiatives...

# Take Home Message

Although the innovation potential of MIRRI can not be fully exploited yet...

... make use of the already existing opportunities to boost innovation!

... harvest the Tree of Innovation!



*MIRRI nurtures the Tree of Innovation*

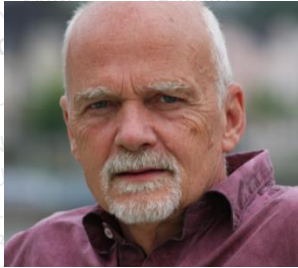
# Thank you



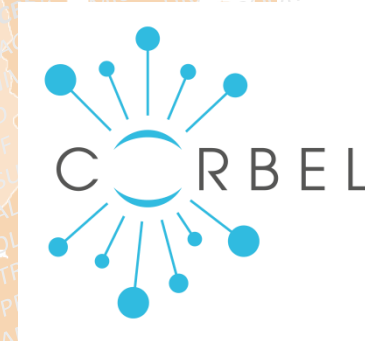
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