# WP3 – NA2: Transnational Access Management and Harmonization

Salvatore Fiore, Jochen Kuhnhenn RADNEXT Kick Off Meeting – 19-21 May 2021

https://indico.cern.ch/event/1029314/





### WP3 - NA2

Efficiently awarding beam time to radiation effects users worldwide will be the cornerstone of the RADNEXT project, therefore a clear and effective approach to the Transnational Access is a key requisite for success.

WP03 fully devoted to the **management of the Transnational Access** (TA) activities:

- > application for beam time,
- coordination of the user selection and support,
- optimised management of the test related activities by the facilities.



# NA2 partners and scientists in charge

- ENEA (IT) Salvatore Fiore (WP leader)
- Fraunhofer INT (DE) Jochen Kuhnhenn (deputy WP leader)
- IROC (FR) Dan Alexandrescu
- CERN Federico Ravotti, Blerina Gkotse
- ESRF (FR) Ennio Capria + external company
- MINES ParisTech, PSL University (FR) Pierre Jouvelot



### NA2 task breakdown:

Task 3.1
WP Coordination and
Communication

Task 3.2
User Support and Access
Requests Management
(ENEA, INT)

Task 3.3

RADNEXT Facilities
Database, Web Portal and
Recommender System
(CERN)

Task 3.4
Experiments' Data
Integration Model for the
RADNEXT Facilities
(ENEA)

Task 3.5
Facilities Access
Procedures Harmonization
(ESRF)



# **User Support and Access Requests Management**





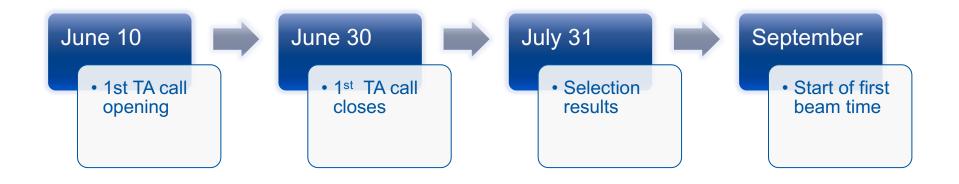
# **User Support and Access Requests Management**

#### TA Proposal evaluation and beam awarding:

- User Selection Panel
  - composed by representatives of Scientific and Industrial areas
  - quarterly reviews and beam granting
  - short lead time
- TA requests portal
  - proposal submission and communication with applicants
  - proposal evaluation process handling
- Less-experienced users' support
  - User Support Expert team
  - counseling, optimisation, efficient use of beam time



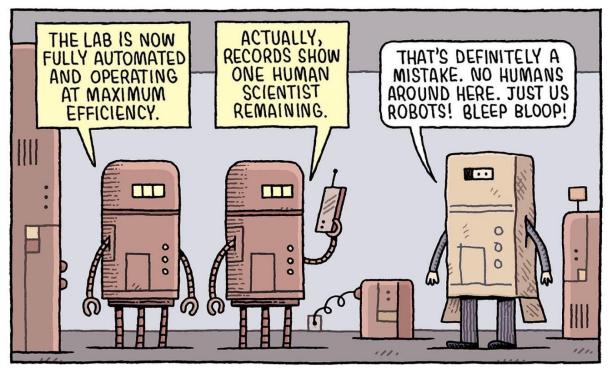
# **Draft TA application schedule**



Keep an eye on <a href="https://radnext-network.web.cern.ch/main/">https://radnext-network.web.cern.ch/main/</a>!



# Facilities Database, Web Portal and Recommender System



https://twitter.com/tomgauld/status/849187295685201920?s=20



# Facilities Database, Web Portal and Recommender System

### Comprehensive database of RADNEXT facilities (and beyond...)

- > standing on the shoulders of giants: <a href="https://irradiation-facilities.web.cern.ch">https://irradiation-facilities.web.cern.ch</a>
- integrate scientific, administrative, logistics info

### WEB portal: database front-end

- facilities info display
- advanced filters for users

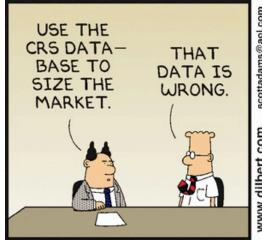
# 1 technical/summer student @ CERN

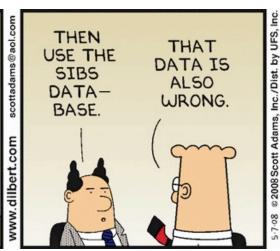
### Towards Al-assisted proposal evaluation

- Natural Language Processing applied to proposals
- extract key info
- facility best match suggestion for applicants and evaluators



### **Experiments' Data Integration Model for RADNEXT Facilities**







https://dilbert.com/strip/2008-05-07



# **Experiments' Data Integration Model for RADNEXT Facilities**

### Experimental activity planning and execution generates lots of data

- > scientific "metadata": tested devices, beam configurations, positions, dosimetry
- personal data, GDPR issues
- > safety, RP, activated samples handling

### Review of existing data management platforms

- custom-made, adapted commercial solutions, already in use within the consortium
- selection of the best available solution

### Standardisation and interoperability of data

- definition of data model for user access to facilities
- > dissemination of data model and data management platform





# **Facilities Access Procedures Harmonization**





### **Facilities Access Procedures Harmonization**

We are building a network of facilities to increase and optimise user access:

- collect use cases and best practices in user management (survey, interviews)
- compare results, derive successful strategies
- disseminate best practices aiming at harmonisation of user management

### Safety training for users

> similar approach based on existing strategies and tools collection and dissemination

Optimise communication and interaction with users from industry

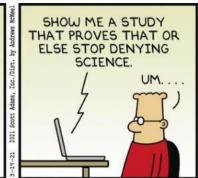
- exploit facilities more experienced with industry related activities
- identify specific needs and "soft skills"
- close contact with Industrial Advisory Panel and NA1 WP



# Thanks for your attention!







https://i.redd.it/5podl7guyyu61.jpg

