

Template TA

Work package number	WP6	Start date	01/06/2019
Activity Type	Transnational Access		
Work package acronym	TA4-ELSA		
Work package title	Transnational Access to FTD/ELSA		
Lead beneficiary	10 - UBO		

1. Publicity concerning the new opportunities for access

[Please describe the measures taken to publicise the opportunities for access].

Information can be found here: <https://www.pi.uni-bonn.de/projects/elsa-ftd>. This includes a description of the infrastructure, application requirements and selection panel. Online forms are provided for grant applications.

This information was circulated throughout our scientific community numerous times to announce the webpage and any upcoming deadlines. Calls for grant applications with dates for the selection panel were clearly disseminated.

2. Selection procedure

2.1 Organization of the Users Selection Panel (USP)

The USP is a board of international physicists for peer reviewed access requests. Members of ongoing hadron physics collaborations and representatives of ELSA are also included.

2.2 Selection criteria

- Formal access request via the Access Coordinator
- Formal proposal (including detailed beam/lab-time request with physics/technical justification and required beam/lab parameters)
- Evaluation by the user selection panel
- Upon acceptance of user-proposal, beam/lab-time allocation by the Allocation Committee
- Formal assessment of the offered services for outside users via web-interface.
- Suitable proposals are selected respecting the principles of transparency, fairness and impartiality.

2.3 Users Selection Panel members

- Prof. Dr. Philip Cole (Lamar University, Beaumont, Tx, USA)
- Prof. Dr. Jochen Dingfelder (Bonn Internal and chair)
- Prof. Dr. Bernhard Ketzer (Bonn Internal)
- Prof. Dr. Michael Ostrick (Mainz University, Germany)
- Dr. Christoph Rembser (CERN)
- Prof. Dr. Piotr Salabura (Jagiellonian University, Krakow, Poland)
- Prof. Dr. Danial Watts (University of York, York, UK)

2.4 Users Selection Panel meetings

Meetings are held to assess grant applications and the dates for launching new requests for submissions. Current information is given here: <https://www.pi.uni-bonn.de/projects/elsa-ftd>.

A USP meeting was held during the final workshop, *Exotic states and baryon spectroscopy* in June 2023 to assess the scientific output of the approved projects which was deemed highly successful.

3. Transnational Access activity

3.1 Detailed description of the activity

[Please describe the activity during the full project duration as reported in Annex I to the Grant Agreement]

The following table indicates the man days spent for projects which successfully used the infrastructure within this funding period.

Projects TA4-6, TA4-1, and TA4-2 (MWPC development, Eta polarised beam asymmetry and Eta prime respectively) were pursued within the BGOOD experiment. Projects TA4-3 used the man days solely during data taking periods. Project TA4-2 used man days for detector development and Project TA4-1 used man days for both detector development and data taking periods.

If a data taking period can be used for multiple projects, the man days below are shared between projects, to ensure there is no duplication.

Table 3.1 Access to the facility during the project

Project No.	User-project acronym	Number of users	Number of man/days spent at the infrastructure
TA4-6	MWPC	1	9
TA4-1	EPBA	8	55
TA4-3	MQS	7	44

3.2 Scientific output of the transnational access activity

Analysis of data taking for both the BGOOD and CBELSA-TAPS experiments has continued and been presented at many international conferences and workshops.

During this period, one paper has been published in peer reviewed journals for BGOOD:

1. *Measurement of the $\gamma n \rightarrow K^0 \Sigma^0$ differential cross section over the K^* threshold*, K. Kohl, T.C. Jude et al., Eur. Phys. J. A 59. 254 (2023)

BGOOD also has two papers submitted for publication, preprints of which can be found on the archive:

1. *Coherent $\pi^0 \eta d$ photoproduction at forward deuteron angles measured at BGOOD*, A. J. Clara Figueiredo, T. C. Jude et al., arXiv:2405.09392 (2024), submitted to Phys. Lett. B
2. *$K^+ \Lambda(1520)$ photoproduction at forward angles near threshold with the BGOOD experiment*, E. O. Rosanowski, T.C. Jude et al., arXiv:2406.01121 (2024), submitted to Eur. Phys. J. A

BGOOD also published two peer reviewed conference proceedings during this funding period:

1. The BGOOD experiment at ELSA - Exotic structures in the strange quark sector? T.C. Jude et al., MESON 2023, EPJ Web Conf. 291, 01004 (2024)
2. The BGOOD experiment at ELSA
T.C. Jude et al., INPCC2022, J. Phys.: Conf. Ser. 2586 012003 (2023)

The workshop, *Exotic multi-quark states and baryon spectroscopy* was held in Bonn in June 2024 to discuss the scientific output within the context of an international meeting of leading scientists in our community.

Table 3.2 List of user meetings

With the exception of project TA4-10, all projects are either within the framework of the BGOOD (TA4-1 to TA4-6 and TA4-9) or CBELSA/TAPS (TA4-7 and TA4-8) experiment and collaboration. The work within these projects form the cornerstone of the pursued physics interests of the experiments. User meetings for projects have occurred during, and been a vital input to collaboration meetings held within this period. These are listed below.

User-project acronym	Date	Venue	Number of users	Overall number of attendees
CBELSA/TAPS	August 2023	Online (COVID restrictions)	7	~40

BGOOD	Analysis meeting every 2nd week	Online	~25	~15
CBELSA/TAPS	Analysis meeting every 2nd week	Online	~3	~14
BGOOD & CBELSA/TAPS	Exotic hadron and baryon spectroscopy workshop, June 2024	Bonn	~32	~50

4. Table to be filled

4.1 Research infrastructures made accessible to all researchers in Europe and beyond through EU support and summary of trans-national access provision per installation

Researcher			Employing organisation/Home institution			User-project acronym	Activity Domain (Discipline)	Installations used by the researcher (*)		
Name	Gender	Nationality	Name	Legal Status	Country			Infrastructure Short Name	Installation ID	Installation Short Name
<i>Alessia Fantini</i>	<i>F</i>	<i>Italian</i>	<i>INFN Roma Vergata</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Alessandro Braghieri</i>	<i>M</i>	<i>Italian</i>	<i>INFN Pavia</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MWP C, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Paolo Levi Sandri</i>	<i>M</i>	<i>Italian</i>	<i>INFN Frascati</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Dario Morici</i>	<i>M</i>	<i>Italian</i>	<i>INFN Frascati</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Rachele Di Salvo</i>	<i>F</i>	<i>Italian</i>	<i>INFN Roma Vergata</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Gianini Nobili</i>	<i>M</i>	<i>Italian</i>	<i>INFN Roma Vergata</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Gianini Vitali</i>	<i>M</i>	<i>Italian</i>	<i>INFN Roma Vergata</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>

<i>Maurizio Ianilli</i>	<i>M</i>	<i>Italian</i>	<i>INFN Roma Vergata</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Dani ele Pecc hi</i>	<i>M</i>	<i>Italian</i>	<i>INFN Roma Vergata</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Faus to Giuli ani</i>	<i>M</i>	<i>Italian</i>	<i>INFN Roma Sapie nza</i>	<i>RES</i>	<i>Italy</i>	<i>EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Fabi o Sant aven ere</i>	<i>M</i>	<i>Italian</i>	<i>INFN Roma Sapie nza</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Fran cesco Ghio</i>	<i>M</i>	<i>Italian</i>	<i>INFN Roma Sapie nza</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Paol o Pedr oni</i>	<i>M</i>	<i>Italian</i>	<i>INFN Pavia</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Susa nna Cost anza</i>	<i>F</i>	<i>Italian</i>	<i>INFN Pavia</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Dom enico Calb ró</i>	<i>M</i>	<i>Italian</i>	<i>INFN Pavia</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Clau dio Scagl iotti</i>	<i>M</i>	<i>Italian</i>	<i>INFN Pavia</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>

<i>Giuseppe Mandaglio</i>	<i>M</i>	<i>Italian</i>	<i>Uni. Messina</i>	<i>RES</i>	<i>Italy</i>	<i>EP, EPBA, MQS, KS, AD, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Antonino Fulci</i>	<i>M</i>	<i>Italian</i>	<i>Uni. Messina</i>	<i>RES</i>	<i>Italy</i>	<i>EPBA, MQS</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Cristina Silvestro</i>	<i>F</i>	<i>Italian</i>	<i>Uni. Messina</i>	<i>RES</i>	<i>Italy</i>	<i>EPBA, MQS</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Angela Maimone</i>	<i>M</i>	<i>Italian</i>	<i>Uni. Messina</i>	<i>RES</i>	<i>Italy</i>	<i>EPBA, MQS</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Maria Romaniuk</i>	<i>F</i>	<i>Ukrainian</i>	<i>INR, Kyiv</i>	<i>RES</i>	<i>Ukraine</i>	<i>EP, EPBA, MQS, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Kenneth Livingston</i>	<i>M</i>	<i>British</i>	<i>Glasgow Uni</i>	<i>RES</i>	<i>UK</i>	<i>PiN, EPP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Simon Gardner</i>	<i>M</i>	<i>British</i>	<i>Glasgow Uni</i>	<i>RES</i>	<i>UK</i>	<i>PiN, EPP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Gary Penman</i>	<i>M</i>	<i>British</i>	<i>Glasgow Uni</i>	<i>RES</i>	<i>UK</i>	<i>PiN, EPP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Paolo Soffitta</i>	<i>M</i>	<i>Italian</i>	<i>INAF-IAPS Rome</i>	<i>RES</i>	<i>Italy</i>	<i>GP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Fabio Muleri</i>	<i>M</i>	<i>Italian</i>	<i>INAF-IAPS Rome</i>	<i>RES</i>	<i>Italy</i>	<i>GP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Sergio Fabiani</i>	<i>M</i>	<i>Italian</i>	<i>INAF-IAPS Rome</i>	<i>RES</i>	<i>Italy</i>	<i>GP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Enrico Costa</i>	<i>M</i>	<i>Italian</i>	<i>INAF-IAPS Rome</i>	<i>RES</i>	<i>Italy</i>	<i>GP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>

<i>Carlo Lefevre</i>	<i>M</i>	<i>Italian</i>	<i>INAF-IAPS Rome</i>	<i>Res</i>	<i>Italy</i>	<i>GP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Alessandro Di Marco</i>	<i>M</i>	<i>Italian</i>	<i>INAF-IAPS Rome</i>	<i>Res</i>	<i>Italy</i>	<i>GP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Elisabetta Baracchini</i>	<i>F</i>	<i>Italian</i>	<i>GSSI</i>	<i>Res</i>	<i>Italy</i>	<i>GP</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Alessandro Sturniolo</i>	<i>M</i>	<i>Italian</i>	<i>Uni. Messina</i>	<i>Res</i>	<i>Italy</i>	<i>EP, MQS, KS, AD, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Antonio Riggio</i>	<i>M</i>	<i>Italian</i>	<i>Uni. Messina</i>	<i>Res</i>	<i>Italy</i>	<i>EP, MQS, KS, AD, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Dmytro Burdyny</i>	<i>M</i>	<i>Ukrainian</i>	<i>Khar'kov Institute of Physics & Technology</i>	<i>Res</i>	<i>Ukraine</i>	<i>EP, MQS, KS, AD, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>
<i>Vladimir Ganenko</i>	<i>M</i>	<i>Ukrainian</i>	<i>Khar'kov Institute of Physics & Technology</i>	<i>Res</i>	<i>Ukraine</i>	<i>EP, MQS, KS, AD, MRPC</i>	<i>Physics</i>	<i>ELSA</i>	<i>1</i>	<i>ELSA</i>

Participant number	Organisation short name	Short name of infrastructure	Installation		Unit of access	Min. quantity of access to be provided in Annex I (A)	Access provided in RP3
			Number	Short name			
10	UBO	ELSA	4	ELSA	1AU	1400	617