		EOSC-Nordic	EOSC-Pillar	NI4OS-Europe	ExPaNDs	EOSC Synergy
Concepts for FAIR implementation (Pillar 1)	Rec. 1: define FAIR for implementation	Implementation of FAIR follows the FAIR Evaluator (Wilkinson et al. 2019) and the OC-FAIR Office. D4.1 $\pm$ D4.3 will detail this including FAIR tecomentadions and the use of hadvathors and MAM events to support communities to teppenent. Early (if second) insubs presented 22 April 114 (second) insubs presented 24 (se	DA: 1 PARP Research Data Management Tool set - first material 20 Jane 2020 DA: 2 FAIR research Data Management Workbench Openition Report DA: 6 Fair Research Data Management Tool set update (Annh 24)	Independentiation of FAR's abouting to The FAR's Guidag Processies for search for the manufacture and dewardship by Welness et al. Homaton on the FAR' update attractory of HAOS Europe are provided in the delevanble DL 1 *EOSC service and FAR update attractory which can be found on Under Monaton waarding FAR implementation can be found in the Monaton waarding FAR implementation can be found in the delevanable DL 2 *Lata eposition (Insteadiona) OPENMFAR compliance all attractory 271618	02.1/2.3 Draft/Final extended data policy framework for Proton and Neuton Ris (Aug 2020/Aug 2021); TS 1.1 Workshoy to promote FAIR principles (to take place Sep/Oct 2020)	na
	Rec. 2: Implement a model for FAIR digital objects	Indrecity via the FAIR Evaluator and FAIR recommendations 10.1, due Aug/2020), Follow the FAIR Digital Dibject Farmenok (PIDs, applied literaffer metadata and data). Dison: the implementation by the valuator color Music Watmics. Training a corgoing since 2019 (put independently of the EDSC-Nexic poper) and by the end of 2020 we will have the Dison of the term of the since of the Dison by CO-FAIR.	WP5.1 and WP5.2 will delive a pick when data repositories from (once of) the use cases of the project are federated. It will use existing tools to proof the concept which will include the FARR digital depicts concept and will delived. To he work will be discussed and shared with other call 50 projects. The behavior and comparison of the project and the depict of the pick of the experience theoretical to comparison the pick on the experience theoretical to comparison the pick of the experience theoretical to compare the pick of the experience.	Task 1/2 3 "Open and FAIR data in practice: tools for RDM libering the calls "Recycle" (s. 16 aniset go in the Otherword (s. 16 aniset)" (s. 16 aniset) (s	02.20.7 DetRFinal Recommendations for FAIR Photon and Neutron Data Managemers (Aug. 2000/File: 2022), D0.3 Manaced Interfactures for PDIs Photone and Meson Ris (Aug. 2011) 1.1 Wester), point promote FAIR principles (to take place Septid: 2020)	D.3 Intermediate sport on technical framework for EOSC FAR data proregues implementation. Describes the evaluation of the mounteraindicity for availant FARBFAR and powides data and automatical for parameterization and the programmatical for the August 2003). D.5 Frait agont to technical framework for EOSC FAR data principies implementation. Implementation data for an extensional finamento for to be attracted at FARbesta. Any change or addition to the attraction data for the out-of any extension to the the court of the COSC of the sport of the two 2017).
	Rec. 3: develop components of a FAIR ecosystem	Supported through the testing and development of the FAIR Maturity Evaluator on a 100+ data repository sample, highly comport FAIMmattion activities/support for the second second providers (e.g. excent) and the second second second metadata, hackathons + MMA, Results from the first epoch evaluations for FAIM Maturity will be published in D4.1 (Aug2020) and D4.3 (Feb2022).	WP4 will look at the status of policies in the participating countries and line them up with legal practices and procedures. This includes security, access, right of use policies.	br. + incurrence on supporting occurs and view https://doi.org/10.5281/zeneod.3734617.11% dol/weitable discribes the incentives and rewards that can be emphysic to improve the uspital of ORM and ARAYR ogeneral as well as many support on the organization of the organization and the organization of the organization of the organization of 24. "Data repository integration and OREMFAIR complance guidelines", https://doi.org/10.2281/zenodo.3736149) This deliverable delivers to results of the analysis of guidelines for open science.	02.4/8 (Active) DMP's for Photon and Neutron RIs (Aug 2021/Aug 2022)	D4.1 - Best Practices Elicitation including Data Management Plans (Currently in review)
	Rec. 16: Apply FAIR broadly	We aim to introduce recommendations for FAIR services (in collaboration with WP3) and for data repositories (including publishing of code).	D5.4 FAIR-oriented research data management: Support, Training and Assessment Activity Report (1 of 2), 31 Dec 2020 D5.4 FAIR-oriented research data management: Support, Training and Assessment Activity Report (2 of 2) .30 June 2022	Training the trainers programme focuses on Open and FAIR RDM; promoting those principles at the national level by the trainers is expected	D2.2/2.7 Draft/Final Recommendations for FAIR Photon and Neutron Data Management (Aug 2020/Feb2022)	Working with FAIRsFAIR to see where the overlap is between Software-QA and Service-QA and what that means for FAIR. Not an expressed task but happening as part of collaboration activities.
	Rec. 17: Align and harmonise FAIR and Open data policy	Harmonising policies in the region and FAIR incentives is on the agenda of WP4 in the last year of the project (2021-22).	WP4.1 will ascertain requirements for open data, data potection and cross border data access with the FAIR and access the second data access with the FAIR and the second data access the second data access the second traditional border data and Policy framework and federation bluepinch December 2020 with to the region covered by Pillar (IT, DE, FR, BE, AT)	NPO works on building national OSC initiatives alming at simulating discussions regarding national research cellings and EOSC policy (init FAR) table sock of OpenAINE NOADs experience and resources that facilitate policy alignment.	D2-1 Draft extended data policy framework for Photon and Neutron Rit (Aug 2020); D2-3 Final data policy framework for Photon and Neutron Ris (Aug 2021)	Looking at the SLAs in place for service providers related to data sharing, storage and transfer - making sure DMPs are available. Looking at the AAI policies in place and defining changes which might be excommend to improve/altow transnational data sharing by service providers.
FAIR culture (Pillar 2)	Rec. 4: Develop interoperability frameworks	This recommendation is supported through the use of the Wilkinson et al. 2019 evaluation indicators, which has a strong focus on interpretability are used of a number of machine actionable metadata related to knowledge representation and FAIV coachulante. Detailed in D4.1 (Aug/2020) and D4.3 (Peb/2022).	See Rec. 2	WII elaborate on publishing and harvesting repository metadata in a from that could be used to catalogue them DJ. T. Best practices for on boarding and related policies. https://zenodo.org/incord/37261534.Xma0Vlgsbcd	22.2/2.7 Draft/Final Recommendations for FAIR Photon and Neutron Data Management, Jung 2020/Feb 2022) 20.5 Report on addata, gap analysis and randmap breasts materiata catalogues for EU national Photon and Neurion Ris (Jung 2020) Da Releases V10 SEAMS ontology available as an EOSC online service (Feb 2021)	nia
	Rec. 5: Ensure data management via DMPs	Not a priority in our WP, but one use-case in WP5 on DMPs	NA	peduating a FAIR10MF via Agos (machina adamate too), spoke RAA make MBK somma polya adata takadard and providers versioning, publishing and assigning DOIs to DMPs); combubing to enhanding the Argos tool with standards used in the region D4.5 Delway of legal, technical and procedural tools (type Demo), flevember 2020) comd set legal, technical and procedural tools (type Demo). Mexember 2021)	D2.418 (Active) DMPs for Photon and Neutron Ris (Aug 2021/2022)	D4.1 — Best Practices Elicitation including Data Management Plans (Currently in review)
	Rec. 6: recognise & reward FAIR data & stewardship	Incentives are mapped and innovated for FAIR uptake in T4.3 (2021-2022) and will be detailed in D4.4 (Apr2022).		D4.1 Incentives for supporting ORDM and FAIR, https://zenode.org/incode/37361688 XxyVMicyY2y, FAIR data and stewardship rewards will also be tackled by the WP2 national open science initiatives.		M3.4 – Badge issuing (for Software & Service Quality Assumnce) - Iniked to but not locused on PAIRness Assessment.
	Rec. 18: Cost data management	NA	NA	Training on Open and FAIR RDM also focuses on two aspects of RDM costs: a. from the researchers point of view and how they can calculate costs following the different steps of a data management lifecycle, and b. from the institutional providers point of view and how they can calculate the costs to build curation services		nia
	Rec. 19: Select and prioritise FAIR digital objects	Implicitly support FAIR Digital Objects towards data providers, but not explicitly towards researchers	Pillar is considering implementing FDO concepts for its Federated Data Space			nia
	Rec. 20: Deposit in Trusted Digital Repositories	Activity to support the certification of repositories. Results will be published in D4.5 "Implementation of certifications and data standards"	Long term preservation of the datasets collected as part of the use cases will be done in a eTDR	One of the goals of the project is to certify specific processes of RDM. Within the work of WP4 and WP5 best practices for repositories are examined	D3.3 Demonstrate ICAT and SciCat released with APIs compatible to ExPaNDS (Feb 2022)	n/a
	Rec. 21: Incentivise reuse of FAIR outputs	Will also be addressed to some extent in: D4.4 Policies and incentives, D4.3 FAIR uptake,		D4.1 Incentives for supporting ORDM and FAIR, https://zenodo.org/record/3736148#.XoYMfg:r/2w D2.2 : National OSC initiatives models (due August 2020),	federated EOSC services	nia

		EOSC-Nordic	EOSC-Pillar	NI4OS-Europe	ExPaNDs	EOSC Synergy
FAIR ecosystem (Pillar 3)	Rec. 7: support semantic technologies	The FAIR Multiply variable to activity using various howneasts to activity matchina actionation matchina (anomatics). The task that detects the meast to 12.2. Support the adoption of FAIR data activations of https://www.inter.no.wki/EGOS/Acviditi.tit. of Taska), but does not start unit 8692020 (nport D14 addatast) and Aug20223, Supporting the adoption of semantic attributes within the various communities by MAIA lacation events - communitation. Hopps to synchronise our efforts on this activity with the induces on the particular to the Springer and the with the efforts induces in particular to the Springer and the second	WPC 5 will gather types of ontologies in use which can be used as a step store towards machine actionable metadata for FDD.	N4OS-Europe will use existing semantic shemas	D3.2 Reliase V1.0 ExPMIDS ontology available as an EOSC online service (Feb 2021)	Algnment of policies to the European Interoperability Pramework (EIF). Not a specific task or project focus.
	Rec. 8: Facilitate automated processing	Indirectly supported via the FAIR Maturity evaluator that is holy automated itself and promotes machine-actionability, which ultimately enables automated processing. Origoing activity throught the project.	WP7 will implement workflows using VRE	WP4 will facilitate automation processes through the data processing tools (type Damos, 1) (bywerthos 2020) potentially 04.7 04.7 Second set legal, technical and procedural tools (type Damos), (bywerthos 2021), A categorisation of contemporary took supporting FAIR and ORDM, applicable at the strategic operational of technical terms provided in the strategic operational operational of technical terms provided in the strategic operational operational operational operational terms provided in the strategic operational operati	D4.5 Deployment of Analysis Services for EOSC (Jun 2022)	MD.6 – Software QA-as-a-Service above to plug in generic software for CI/CD. Automated pipelines for adding Software and Services to the EOSC - this should respect FAIR and RoP. (To be possible for generic software & services by the end of 2021)
	Rec. 9: Certify FAIR services	Support for self-assessments and contribution of data mpostories according to CTS is a central activity (F4.2.3) in the project and process and marke will be detailed in DL3 market and process and market will be detailed in DL3 market and process and market will be detailed in DL3 market and process and market and process and process and market and process and process and process and market and process and process and process and data. Athrng to support 3.6 mpostories in this way during the period.	Services delivered as part of the project will stick to the FAR recommendations. However, the certification of FAR services a not matur enough to be in scope.	The second state of Faller State (State State St	02 6 Bell-websiten Photon and Neutron Pils for FAIR data centification (Feb 2022)	Whitepaper: State of the art meaning digital badge issuing technologies: https://digital.cice.edu/and/el/1026/1205448 Advanced and and and and and and and and and an
	Rec. 22: Use information held in DMPs	NA	NA	NHOS-Europe DMP has been produced in deliverable D1.14 "Data Management Plan"	D2.8 Active DMPs for Photon and Neutron Ris (Aug 2022)	Giving some process guidance for developing DMPs for services joining the EOSC. D4.1 – Best Practices Elicitation including Data Management Plans> Deliverable focusing on work with thematic services to employ data management plans as part of the project.
	Rec. 23: Develop components to meet research needs	NA	See Rec. 1		D3.3 Demonstrate ICAT and SolCat released with APIs compatible to ExPeNDS (Feb 2022)	See Rec 9.
	Rec. 24: Incentivise research infrastructures to support FAIR data	T4.3 "Insentives for the uptails of FAIR practices" will map and identify effective incomises for various stateholdes. Activity starts 2021 and culminates in D4.4 (Apr82022).	A federated data space inclivise the uptake of additional data spaces and will connect data islands.		Inderated EOSC services	See Rec 9 - Badging provides recognition.
Skills for FAIR (Pillar 4)	Rec. 10: Professionalise data science & stewardship roles	NeX2 popular incontinuon has maked a regular levels of the large second processing of the CP / PR strempts has regular by an of 21229 expect more than 100 trained the regular by and of 21229 expect more than 100 trained strempts. By each distantiation of the importance of 1.1 there are no explicit actions to controllate to taking among large and the strempts and the strempts and the strempts or reserved and the strempt and the strempt or reserved and the strempt and hands on exercises using tools and use-cases.		Through training activities and dissemination events of the pargical with a lobal of Gold persons trapstest. All the relevant the second sec	DH 1 Annual report on training activities (Aug 2020, 2021, 2022)	Development of a train the latter guids for the associated platforms being developed on the propert.
	Rec. 11: Implement curriculum frameworks and training	NA	D5.3 Training Plan (Dec 2019)	The project supports Training of Partners and cenation of training material to be translated to the partners' languages for Fairness. The material will be based on existing training materiallyuidelines transformed to meet stakeholders' needs according to the project's stakeholders' survey findings.	D5.4 Report on lessons learned and future prospects for adopting best practices on data FAIR principles, data management and data stewardship at the ExPaNDs Ris (Aug 2022)	WP6 is finalizing a report about MOOC solutions available as a preliminary step for the development a tool that will help data producers, stewards, services and infrastructures run their own training events about Open Science in general
				1		
Incentives and metrics for FAIR data and services (Pillar 5)	Rec. 12: Develop metrics for FAIR digital output	Evaluation of repository FAIRness is achieved by averaging N=10 datasets from the respective repository. More than 100 repositories are volumed. The submittee listing and multiple project has contributed to the automate listing and multiple provements of the FAIR Mature evaluation. Social control havester and many of the indicators. Details to be provided in D4.1 (Aug2020) and D4.3 (Feb2022).	Together with the catISb an initiative to define metrics (indicator) which include indicators on implementation of FAIR for continuous monitoring has been started.	D4.3 has identified studies, frameworks and bolt that propose and or make use of FAR metrics. FAIR Maturely Model is also guiding practices in that are and service providers will be informed about all possible solutions for assessing FAIRmess and will be provided with support within WP3.4 and 5 should they are willing to implement them.	02.1 Draft data policy framework for Photon and Nauton Rts (Aug 2020) – evaluation using FAIR Data Maturity Model - write up as possible use case?	
	Rec. 13: Develop metrics to certify FAIR services	WP3 is developing a Service Maturity framework, but the FAIR aspect of that is less clear atm.	NA	D4.3 has identified studies, frameworks and tools that propose and/ or make use of FAIR metrics, including for repositories. Moreover, for the needs of new tools to be developed in WP4, FAIRsFAIR report is taken into consideration so that they are designed from scratch as FAIR-enabled tools/services.	D2.6 Self-evaluation Photon and Neutron Ris for FAIR data certification (Feb 2022)	
	Rec. 25: Implement and monitor metrics	FAIR Maturity evaluator is the implementation of metrics and the project is monitoring the evolution of those metrics among 100+ repositories in the region and will monitor these over 2 years using a fixed version of the evaluator.	Pillar together with 5b projects work on metrics to be rolled out in National initiatives - this includes metrics related to FAIR	Metrics derived from onboarded services and repositories will be monitored at the pre-production platform before fed to EOSC.		
	Rec. 26: Support data citation and next generation metrics	NA	NA			
Investment in FAIR (Pillar 6)	Rec. 14: Provide strategic and coordinated funding	NA	The project has funds to support applicable use cases of new services with integration into EOSC. The applicants will be selected through an open call. At the time the selection criteria for the applicants are not yet defined but will contain myunements myaurong FAIReas of the proposed service candidate.	Strategic and contributed funding will be covered in business plan as well as sustainability year. Regarding Business Plan, here is a particular tas focurarig on such specific, name? T2.4 "Business Models" which is expected to deliver D2.5 "Business model errecommentations" by Ochber 2021. In saddlen, task 7.4 "Innovation management and D7.7 "Sustainability Report" which is expected to be delivered by August 2022.	(31.7 Sustainability policy report (https://doi.org/10.5281/zenodo.3715279)	nia
	Rec. 15: provide sustainable funding	NA	WP4.5 investigates models for funding in the different participating countries and will deliver lessons leamt.	17.4 Innovation management and sustainability. This leads to two deliverables, D7.2 "Marketing, dissemination and sustainability pin", https://zennodo.org/record/3736165#.XrR7bKgzY2x (November 2019) as well as D7.7 "Sustainability Report" (M36)	D1.7 Sustainability policy report (https://doi.org/10.5281/zenodo.3715279)	n/a
	Rec. 27: Open EOSC to all providers but ensure services are FAIR	What is expected to "ensure that services are FAIR- complant" is not very clear to us yet. What we have discussed is to include machine-actionable metadata to declare what type of service and upported APFs a given service provides by the wor or yet clearly established what envice provides by the wor or yet clearly established and the work of the service of the service of the service of the service of the service of the service of the service hereopenability.	Assesment of FAIRness of services is the next step - currently man objective is inclusion to EOSC catalogue.	Gradual migration of regional services and expositories travends EOSC with Socia on FARNess. Deliverable DJ.2 "First report on pre-production environment" (Aune 2020). Deliverable DJ.5 "Final report on pre-production environment" (April 2020).	D4.5 Deployment of Analysis Services for EOSC (Jun 2022)	22.3 Intermediate report on integration efforts. This report will provide information on the implementation status of linguistion Plan. (24, 2020) 22.4 Final report on EOSC Integration. This report will be a valuable "Nathodor" on how to Integrate national clouds, thematic resources, and data repositotes conformant to common quarky standards, and harmonic of in terms technological, policy, and legal aspects. (21, 2022)