National	Bovey Tracey	Bristol	Cardiff	Glas	gow	Kevworth	Leeds	London	Manchester	Southampton	
09:30 - 10:00					Nick Bearma	n : Opening and We	elcome				
10:00 - 10:30				Anita	Graser: Shar	ing Open Spatial D	ata Science				Key:
10:30 - 11:00			Tim	Sutton: 20 Year	s of QGIS: Su	cesses and Failure	s of a Global Phenome	enon			Workshop
11:00 - 11:30	break	break	break	bre	ak	break	break	break	break	break	Not streamed
11:30 - 12:00	Using open-source code and data to ask questions about the environment	Straight to the Point: Visualize Massive 3D Point Clouds with TileDB and BabylonJS	Improving user experience with Cloud Optimised Geotiffs (COGs)		pen Source Spatial Services in the Cloud Loca		Composing Software: Spatial for the JAMstack generation	Serving executable processes on the web through open source implementations of the OGC API - Processes Standard	An open source exploration into the impact of map data coverage on estimations of access to healthcare	A safe route to school with PgRouting and QGIS	Streamed in from external speaker
12:00 - 12:30	Helping to develop an urban tree planting strategy using QGIS	Why 99% of humanity doesn't use GIS, and what we plan to do about it	Making the Intractable, Manageable	Defining da accelerate develo	dashboard	for details	Mergin Maps; an open source platform for your field data collection	Building a Web GIS - a full stack overview	Building a Web GIS - a full stack overview	Going open the journey so far at Dorset Council	In person presentation streamed out
12:30 - 13:00	break	break	break	bre	ak		break	break	break	break	Streamed in from
13:00 - 13:30	break	break	break	bre	ak	break	break	break	break	break	other venue
13:30 - 14:00	Automating data downloads from the new OS National Geographic Database (NDG)	Open source GUI software for geolocated time series visualisation	Mapio Cymru talk 1 - OpenStreetMap in a lesser-resourced language	Hillshades anywhere in the world with QGIS and MapTiler			Prioritisation of Obstruction Removal on Active Travel Networks	Terra Draw: Drawing for any map on the web	DIY RTK GNSS		Italics - Timings will vary slightly - check local programme for details
	Georeferencing non- standardised and very	Adding Audio to Mans	Mapio Cymru talk 2 - DataMapWales Azure	How to get a good response	Workshop:	Discussions: Open source at BGS; field data capture; BGS open data in QGIS	Developing an inclusive accessibility index for UK cities	Community Mapping	Bringing 40+ petabytes of NERC environmental data to more users	Workshop - Using the OS Data Hub to automate Open Data ETL to open source databases	
14:00 - 14:30	old map/plans via QGIS and other tools.	Casang radio or maps	Cloud	on. stackexchange	Multiscale Geographicall y Weighted Regression		Experimenting with Social Media data using Open Source Software	Food Deserts	Free and Open Source Geospatial Software within a Modern Consulting Organisation		
14:30 - 15:00	My Geospatial Toolkit - What's in your FOSS Box2	From EO to geo development: some observations Grids - the future of small area statistical geographies?	PGaudit and Active Travel	Kart: an. introduction to practical data versioning for geospatial		Unconference - decide topics collectively on the day	FOSS meets not FOSS APIs for assessing flood risk anywhere in the world Serverless Tile Services in the Cloud	Disaster Ninja: an open- source event management solution providing information about disasters.	Kart: an introduction to practical data versioning for geospatial	Asset Management Applications Using GeoServer	
15:00 - 15:30	break	break break break break break break									
15:30 - 16:00	Stream talk	Analysing Access to UK Public Rights of Way with the QGIS Graphical Modeler	Deploying a simple web map to AWS	(Yet another ta and how it's ma eas	king our lives	break	Michael West: PostGIS Out-DB Rasters in AWS Batch	Networking / Q&A / Adhoc Lightening Talks	Analysing Access to UK Public Rights of Way with the QGIS Graphical Modeler	State of GeoNode	
16:00 - 16:30				Regina	Obe: PostGIS	Vision: Past, Prese	ent, and Future				
16:30 - 16:45					Nick E	Bearman: Wrap-up					

	Speaker	Title	Location	Notes
09:30 - 10	00 Nick Bearman	Opening and welcome	Internet	
10:00 - 10	30 Anita Graser	Shaping Open Spatial Data Science	Internet	
10:30 - 11:	00 Tim Sutton	20 Years of QGIS: Successes and Failures of a Global Phenomenon	Internet	
11:00 - 11:	30	Coffee	Venue	
11:30 - 12:	00 Sam Lavender	Using open-source code and data to ask questions about the environment	Venue	
12:00 - 12	30 Dave Partridge	Helping to develop an urban tree planting strategy using QGIS	Venue	
12:30 - 13	00	Lunch	Venue	
13:00 - 13	30	Lunch	Venue	
13:30 - 14	00 Matt Travis	Automating data downloads from the new OS National Geographic Database (NDG)	Venue	
14:00 - 14	30 Tom Thomson	Georeferencing non-standardised and very old map/plans via QGIS and other tools.	Venue	
14:30 - 15	00 Dave Barter	My Geospatial Toolkit - What's in your FOSS Box?	Venue	
15:00 - 15	30	Coffee	Venue	
15:30 - 16	00	Stream external talk	Internet	
16:00 - 16	30 Regina Obe	PostGIS Vision: Past, Present, and Future	Internet	
16:30 - 16	45 Nick Bearman	Wrap-up	Internet	

		Chanker	Tido	Lagation	Notes					
		Speaker	Title	Location	Notes					
	09:30 - 10:00	Nick Bearman	Opening and welcome	Internet						
	10:00 - 10:30	Anita Graser	Shaping Open Spatial Data Science	Internet						
	10:30 - 11:00	Tim Sutton	20 Years of QGIS: Successes and Failures of a Global Phenomenon	Internet						
	11:00 - 11:30		Break							
	11:30 - 12:00	Norman Barker	Straight to the Point: Visualize Massive 3D Point Clouds with TileDB and BabylonJS	Internet						
	12:00 - 12:30	Christopher Brown	Why 99% of humanity doesn't use GIS, and what we plan to do about it	In person						
	12:30 - 13:00		Lunch							
	13:00 - 13:30		Lunch							
	13:30 - 14:00	Yann Ziegler	Open source GUI software for geolocated time series visualisation	In person						
	15.50 - 14:00	.a.m ziegiei	Specifica Con animare in geninated unite series visibilisation	poravit						
	14:00 - 14:30	Sean McGee	Adding Audio to Maps	In person	Details tbc					
	14:30 - 15:00	Alastair Graham	From EO to geo development: some observations	In person						
		David Kerr	Grids - the future of small area statistical geographies?	In person						
	15:00 - 15:30		Break							
	15:30 - 16:00	Ant Scott	Analysing Access to UK Public Rights of Way with the QGIS Graphical Modeler	In person						
	16:00 - 16:30	Regina Obe	PostGIS Vision: Past, Present, and Future	Internet						
	16:30 - 16:45	Nick Bearman	Wrap-up	Internet						
Name	Organisation	Please give a brief	Which local venue would you like to present at?	Which type of	Talk title:	Talk	Are you hanny	Are you happy	Do you have	Is there
		biography:		session would you like to present?		description:	for the talk to be recorded / photographed ? (We will	for the talk to be streamed to other FOSS4G: UK Local	any accessibility requirements?	anything else we should know?
Christopher Brown	mapstack	Founder of mapstack.io. CEO at mangomap.com.	Bristol	Presentations (30 min)	Open map data is broken.	For novice map users open data is broken as the barriers to entry are too high	Yes	Yes	No	No
Ant Scott	Astun Technology	I've been a GIS consultant at Astun since 2014, working on Astun's core iShare product, but	Bristol	Presentations (30 min)	Access to UK Public Rights of Way with the	Ramblers, are	Yes	Yes		This was my talk from FOSS4G 2022 in Florence
Christopher Brown	mapstack io	also leading training in	Bristol	Presentations (30 min)	QGIS Graphical Why 99% of humanity doesn't use GIS, and what	working to An introduction to our work at mapstack. Our plans to map all	Yes	Yes	No	No
	Bristol Glaciology Centre, School	During my PhD thesis, my main research topics	Bristol	Presentations (30 min)	we plan to do Pygoda: a graphical software	of the worlds Observations in geosciences have produced	Yes	Yes		I can easily adapt my talk duration if
	of Geography, University of	were the rotation of the Earth (Chandler wobble).	Briefol	Dracentations (00:)	package to visualise.	- and still produce	Vac	Vac		needed.
Margriet Groenendijk	TileDB	Margriet is a Geospatial Data Scientist at TileDB based in the UK. She joined from IBM, where she worked as a Data &	Bristol	Presentations (30 min)	Straight to the Point: Visualize Massive 3D Point Clouds with TileDB and	3D points with various	162	Yes		
Alastair Graham	Sparkgeo	Alastair is the UK Lead for Sparkgeo. a geospatial services company that employs	Bristol	Presentations (30 min)	From EO to geo development: some observations	Once upon a time Alastair was an Earth observation	Yes	Yes	No	Vegetarian

David Kerr	National Statistics	I am a Senior Geospatial Analyst at the Office for National Statistics with a background in GIS application development	My presentation will be longer than 10 minutes but less than 20	future of small area statistical geographies?		Yes	Yes	No	No
Sean McGee		Senior GIS Software at CGI. Previously software engineer and developer advocate at Esri UK	Presentations (30 min)	Maps	Sean McGee will be showcasing an open source project he's	Yes	Yes		If possible, please can you let me know if there will be audio available

	00:45 00:45	Speaker	Title	Location	Notes		
	08:45 - 09:15	Karta Milliana (Malak Ossa)	Arrival Tea/Coffee/breakfast	venue			
	09:15 - 09:30 09:30 - 10:00	Kevin Williams (Welsh Gov.)	Local Chair Intro and local arrangements	venue			
	10:00 - 10:30	Nick Bearman Anita Graser	Opening and welcome Shaping Open Spatial Data Science	Internet			
	10:30 - 11:00	Tim Sutton	20 Years of QGIS: Successes and Failures of a Global Phenomenon				
	11:00 - 11:30	Tim Sutton	AM Break Morning treat/Tea/Coffee	Internet			
	11:30 - 12:00	John Cook (Welsh Gov.)	COGS - We will describe how we solved the business problem of	venue			
	11.30 - 12.00	JUIN COOK (WEISH GOV.)	codes - we will describe flow we solved the business problem of handling (with QGIS/GDAL) and presenting very large aerial coverages using COGs and presenting output on DataMapWales.	venue			
	12:00 - 12:30	Seb Clarke (Environment Systems)	Vector-style reasoning, using Attributed Rasters	venue			
	12:30 - 13:30		Sandwich Buffet Lunch				
	13:30 - 14:00	Carl Morris(Mapio Cymru)	Mapping in the Welsh language Part 1: Introducing Mapio Cymru: using the Switch2OSM stack to build a map server for a lesser-resourced language	venue			
	14:00 - 14:30	Sam Franklin(CGI)/Tom Colley(Welsh Gov.)	Mapping in the Welsh language Part 2: Implementing a FOSS4G Welsh-language version of OpenStreetMap in the Azure Cloud for Welsh Government	venue			
	14:30 - 15:00	Tom Colley(Welsh gov)	PGAudit - As part of developing solutions using DataMapWales, there was a requirement for snapshotting views of point-in-time data to audit and retain changes for versioning and comparing over time. First application was all Wales Active Travel project. Using the built in postgres auditing extension, pgaudit.	venue			
	15:00 - 15:30		Afternoon tea/coffee & networking				
	15:30 - 16:00	Dave Dowdin(SparkGeo)	Demonstrating how to deploy a simple web-map to AWS. Starting with a simple upload to S3, then adding CloudFront & a custom domain name, and finally showing how deployment can be automated with code.	venue			
	16:00 - 16:30	Regina Obe	PostGIS Vision: Past, Present, and Future	Internet			
	16:30 - 16:45	Nick Bearman	Wrap-up	Internet			
Name	Organisation	Please give a brief biography:	Which local venue would you like to present at?	Which type of session would you like to present?	Talk title:	Talk area: (free text and we will use these to group the talks if needed)	Talk description:
Sam Franklin,	CGI (Sam	Sam is a software developer for CGI. He	Cardiff	Presentations	Introducing	CaseStudy, WelshLanguage,	This presentation will introduce the Mapio Cymru project, a Welsh language display
Carl Morris Seb Clarke	Cymru (Carl Morris) Environment	specialises in geospatial applications and data pipelines. Sam's interests include FOSS advocacy and Welsh cakes. Carl is a freelance web developer based in Caerdydd/Cardiff, and co-founder of the Mapio Cymru project. His interests include the Welsh language, technology, and the use of the Welsh language in technology.	Cardiff	Presentations	Mapio Cymrul Implementing a FOSS4G Welsh language Openstreetmap base map in the Azure Cloud for Welsh Government	Openstreetmap, geoserver, cloud-tech	web map, based on Openstreetmap (OSM) and provide a FOSS4G case study of incorporating the Mapio Cymru project within Welsh Government's Data Map Wales platform (https://datamap.gov.wales/map/hew#l). The talk will start by outlining the goals and development of the original Mapio Cymru project (https://openstreetmap.cymru/) by the project creators. The context shared will include how FOSS and open data can benefit users of lesser-resourced languages such as Welst-OSS and open data can benefit users of lesser-resourced languages such as Welst-OsS and open data can benefit users of lesser-resourced languages such as Welst-OsS and open data can benefit users of lesser-resourced languages such as Welst-OsS and open data can benefit users of lesser-resourced languages such as Welst-OsS and open data can benefit users of lesser-resourced languages such as Welst-OsC and the Welst-OsC and
oob olullo	Systems	Systems. A talented software engineer with a tenacious approach to problem solving, an excellent eye for detail and a passion for doing things the right way. He has a proven track record of designing, building and delivering software and systems to process and archive data at scale.	Catalin	(30 min)	Intractable, Manageable		Rasters
Dave Dowding	SparkGeo	Dave is a developer at SparkGeo working on various projects; utilising his coding and doud development experience. He has worked in the geospatial development field for the last few years after gaining a Master's de	Cardiff	Show and tell (short & variable)	Deploying a simple web map to AWS	Hosting/deployment of an open-source web-map	Demonstrating how to deploy a simple web- map to AWS. Starting with a simple upload to S3, then adding CloudFront & a custom domain name, and finally showing how deployment can be automated with code.
Tom Colley	Welsh Government	Lead Developer on DataMapWales working for Data & Geography team Welsh Government	Cardiff	Show and tell (short & variable)	Using Postgres auditing triggers to create point- in-time data snapshots	postgis	As part of developing solutions using DataMapWales, there was a requirement for snapshotting views of point-in-time data to audit and retain changes for versioning and comparing over time. First application was all Wales Active Travel project. Using the built in postgres auditing extension, pagaudit.
John Cook	Welsh Government	A geographical and aerial photography analyst working for the Welsh Government having worked as a geospatial information professional in archaeology, topographical survey, geophysical survey and utilities mapping for over seventeen years.	Cardiff	Show and tell (short & variable)	Improving user experience with Cloud Optimised Geotiffs (COGs)	UX COG aerial QGIS GDAL	We will describe how we solved the business problem of handling (with QGIS/GDAL) and presenting very large aerial coverages using COGs and presenting output on DataMapWales.

	Talks					Workshops			
	Speaker	Title	Room	Notes		Speaker	Title	Room	Notes
09:30 - 10:00	Nick Bearman	Opening and welcome	Senate		09:30 - 10:00				
10:00 - 10:30	Anita Graser	Shaping Open Spatial Data Science	Senate		10:00 - 10:30				
10:30 - 11:00	Tim Sutton	20 Years of QGIS: Successes and Failures of a Global Phenomenon	Senate		10:30 - 11:00				
11:00 - 11:30		Break	Senate		11:00 - 11:30				
11:30 - 12:00	Alastair Carson	Open Source Spatial Services in the Cloud	Senate		11:30 - 12:00				
12:00 - 12:30	Mike Spencer	Defining data links to accelerate dashboard development	Senate		12:00 - 12:30				
12:30 - 13:00		Lunch	Senate		12:30 - 13:00				
13:00 - 13:30		Lunai	Senate		13:00 - 13:30				
13:30 - 14:00	Tom Armitage	Hillshades anywhere in the world with QGIS and MapTiler	Biggest of the three options		13:30 - 14:00				
14:00 - 14:30	Ian Turton	How to get a good response on stackexchange	Biggest of the three options		14:00 - 14:30	Ziqi Li	Multiscale Geographically Weighted Regression	best for workshops	
14:30 - 15:00	Robert Coup	Kart: an introduction to practical data versioning for geospatial	Biggest of the three options		14:30 - 15:00		Treigned regression	Попилоро	
15:00 - 15:30		Break	Spare room		15:00 - 15:30				
15:30 - 16:00	Chris McNeill	(Yet another talk on) STAC, and how it's making our lives easier	Biggest of the three options		15:30 - 15:55				
16:00 - 16:30	Regina Obe	PostGIS Vision: Past, Present, and Future	Biggest of the three options		16:00 - 16:30				
16:30 - 16:45	Nick Bearman	Wrap-up	Biggest of the three options		16:30 - 16:45				

	Speaker	Title	Lecation	Notes	1									
-0930	JUNIOVA .	Keywoth wetcome and overview / coffee and networking	Ceyworth venue		1									
- 1000	No.ix Bearman	Opening and velcome	Keyworth sense? Ontine		4									
0 - 1030	Avita Daser	Shaping Open Spatial Data Science	Keyworth venue / Ontine											
10 - 11 00	Tire Sulbin	30 Years of QCES Successes and Failures of a Chobal Phenomenon.	Keyworth venue / Ontine											
0 - 1130		Coffee and refreshing	Ceyvorth senue		1									
30 - 11.60	Alex Donald	Open-source geospatial software for small teams	Coyworth sense		1									
0 - 11.50	Machel Heaven	Prez. A Content by-profile Linked Data presentation loss for epatial data	Ceyworth senue		1									
0 - 12:00	Edward Lewis	BIOS & COC APIL	Coyworth senue											
00-12.10	Danel Warren	An example implementation of Leatlet - a tightweight interactive mapping box	Ceyworth senue		1									
110 - 12:20		DINA	Ceyworth senue	1	1									
20 - 12:30	Dr Chris Williams	An open source approach to geomoghometic analysis and tenan feature classification	Ceyvorth senue		1									
30 - 12:43	D Kathyn Leening	H for geospatial analysis	Severit serve	1	1									
40-12.50	D/ Matthew Harres	The use of CRISIOS is a capability study of a digital twin of UK sols.	Ceyworth sense		1									
90 - 12.00	NAN ZOUZ	Open source for BOX international work	Several result	1	1									
00 - 13.30		Lunch and reference	Several venue	 	1									
30 - 14 00	CV DEAT STREET	Discussion session: Increasing open source adoption at the British Cleatograph Survey	Several venue	1	1									
00 - 1430		Data cardure / Unconference	Several serve	Charterence - arranged on day between participants	1									
10 - 18/00	10	BOTO coast data in Office chance (Throughanna	Consoll sense	Unconference - arranged on day between participants	1									
30 - 18:00 00 - 18:30		BICS open data in OCSS (dens) / Uncontensor Electriforence / Unconference	Keyworth senue	Discontinuos - arranged on day between participants unumbremos - arranged on day between participants	1									
20 - 16:33 20 - 16:00	pre .	Coffee and retractory	Coynorth sense	uncurrent erum - arranges út day bebetet participants	4									
	Mesina Obe	Cultier and retreating ProfEE Vision First Present and Future	Keyworth senue / Ontine	+	1									
					4									
		May-up	Keyworth venue / Ontine	1										
Jahrs from sthe	r versues can be steue	d in the 3D Visualization room / or on personal laptiges												
		An open source agreeant to geomorphometric analysis and tenant feature classification	Magning of rack expressions arrows t	te UK has haddonally been a line and ossi intensive present, and thi	is information is meantful for applica	sions such as he have gentural insurance and preliation. With improved excision	and coverage of rigital terrain models	an and an its development of	min and more assemble modeling bureausts, we	an an our motivations part mapping to	ractions in terms of exempty, contained time. The arcterlying programmatic approach as in how we are naturally	g permanental p	personal and make any	num prelimina uning a sale of open source
		An example implementation of Loader . a lightweight interactive mapping test			t is an open source January times	y for lightweight, mobile blandy interactive maps with a repulsion for simplicity and wait	olly I'll be belong a look into hear EPG	Etwa uther the Leafer Brang	est why he' facility has helped density the may be	bound poplical user interfere of the EP	OE Pand			
	Danierk Leaf @ 905			Page OCAP Februari & Server Tribugal P										
Small) manage and deliver the G	Open assures geospetial software for small interes.	An exercise of few a small team in	the Conteginal Survey of Surface Instant are investiging open source	software in manager and deliver yes	reparted data.								
			My talk will give a total introduction t	e the Land insight digital hair of UK sole project, which was not as a re- used, and how I used geoparates to manipulate data. This allowed ma	multi-site project between UNIDIA, 8	NGS and SAS between December 2007 and April 2003. Most of the lask will become how	OSSAG was used during the project.	But there will also be a small be	trical element, as well as how home board using Oliffe	1865 was in enabling more six miletonal	tion and sharing of data and scripts.			
				maining shallenges, including how they sould be solved using other O										
		The use of OSSISS in a regulatily study of a digital test of SK stale. From A Contentialy profile Linked Carlo presentation has for spatial date.	Freig i will remise the benefits of Pres (https://github.com/EGFLis/Pre	using CSSAS in the project and how easy timedo the where data are	el ample armes siles. Dem i sili sar mens la Konstelige Depti data sili		nda qualisation. I sell present on in	that of the sendor of Peas and o	author of Gentl/MAGE C C - Matheilan Car - In deposit	arke he tod and her it is used, particle	arly for agential Elementic Web data, the profile for which inharmed on OSS SPI openitional and the ConSPUNCE.	and the same		
el fesseen	Emologing Internation sale	Plant & Comberniting profile Contact Clarks presentation test for equal of date	Freely, I will remain the benefits of Pree Intige Lightst condition to Pree The British Contegral Survey is a p Our some falls influentiation in beauti	vaing Cillifal) in the project and how easy timade the where data are of its a Linked Carla With IP Thermounts had that provides resultantly are offic senter expendation with a mission to provide impacted and indepen- d around a long alambing Charle and EUFS technology shock forward in	el aniph annes sites. Den i sil sar nessa is Konsintyr Deph data sili anieni gessiones alivies anii data the edges, the use of spenseuros si	n be "shape", and "Jornal", al data operation as par the 1920's Content biografacion illy P advance in regular (revenuing, driven from the ground up by the alements of both sciencials	and information staff. It is them solve	security to the high quality of a			er), for qualital formartic West state, the graditar for which in housest on COCC DPT quantitation and the ComSPARQ.	Married .		
i Anazon	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	s and information staff. It is them solve	security to the high quality of a			wy for equital formants. With data, the yealler for which inhammed on COCL UPI equalization and the CamBRAGE.	della medici.		
ei feaser	Emologing Internation sale	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be "shape", and "Jornal", al data operation as par the 1920's Content biografacion illy P advance in regular (revenuing, driven from the ground up by the alements of both sciencials	s and information staff. It is them solve	security to the high quality of a			ary to reputal Sementin Helm date, the prefile for which inhanced on OSCS API questional and the GenEPARCS.	des matei		
ini fearan	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	s and information staff. It is them solve	security to the high quality of a			ary for equilad forments ritin date, the profile for which schanari on COCLOP openiturion and the ConSPACE.	des maior		
ini fearan	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	s and information staff. It is them solve	security to the high quality of a			ny to apidal famin'n'i Hal data, to y plinin traken historia a CCC EP apositanium and the Cambridia.			
eri Rossen	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	s and information staff. It is them solve	security to the high quality of a			ny hi ny dia kaomin'ny fisiana ao	Manager .		
inel Reason	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a			ng Ser apaka Benamin Tiba dan, iku pelalaran dan hawari an OSC (AP queduculos and ter EurOSAC).			
inel Reason	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	er source hash and the facility and sous of solubs	bender half by you'de.	-	dela malai	Notes	
ini fearan	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	or vacuus tests and the facility and sees of solidar 00.30 -	Speaker 1 1000 Speaker	The Same and distance		Sides	
ini fearan	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	er some hade and the facility and sees of estable	Speaker 1 1000 Nuk Beerman 1 1000 Nuk Beerman	Tiple - Cyproling and artifaction - Cyproling and artifaction - Cyproling and artifaction Extension - Cyproling Cyproling College (College) - Cyproling Cyproling College (College) - Cyproling Cyproling College - Cyproling Cyproling Cyproling College - Cyproling Cyproling Cyproling College - Cyproling Cyproling Cyproling Cyproling Cyproling College - Cyproling Cypr	Location Ordine Ordine	Notes	
i Anazon	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon nurses adoption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	or source tenh and for famility and soon of collaboration and so the famility and soon of collaboration and so the source of collaboration and source of collaboration and so the source of collaboration and so the source of collaboration and so the source of collaboration and	Speaker 1-10-00 Muki Bearman 1-10-00 Muki Bearman 1-10-00 Muki Bearman	Total Total and an animal and animal	Location Colone Colone Colone	Notes	
ini fearan	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common differiors to open sources a common differiors to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	or name task and for facility and sace of calculating and calculating	Speniar 1 - 10:00 Note Berman 1 - 10:00 Tee Sallan 1 - 10:00 Tee Sallan 1 - 10:00 Tee Sallan	Tiple - Cyproling and artifaction - Cyproling and artifaction - Cyproling and artifaction Extension - Cyproling Cyproling State States - Cyproling Cyproling States - Cyproling Cyproling States - Cyproling Cyproling States	Location Ordine Ordine	Sides	
ini fearan	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	or source tends and the facility and sacra of collaboration and and and and and and and and and an	Spatiar 1 1000 No. Searcian 1 1000 Note Searcian 1 1000 Note Searcian 1 1000 Searcian 1 1000 Searcian 1 1000 Searcian	The company of entering and ent	Location Colone Colone Colone	Sides	
eri Rossen	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	en source tenh and the fee hilly and source of entirely (20.30) (20.30) (20.30) (20.30) (20.30) (20.30) (20.30) (20.30) (20.30)	Speaker 3 1000 No. Speaker 1 1000 No. Speaker 1 1000 No. Speaker 1 1000 Annual Speaker	The company of entering and ent	Location Colone Colone Colone	Sides	
i Anazon	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	en source tenh and the fee hilly and source of entirely (20.30) (20.30) (20.30) (20.30) (20.30) (20.30) (20.30) (20.30) (20.30)	Speaker 3 - 10.00 No. Speaker 1 - 10.00 No. Seamman 1 - 10.00 And Seamman	The Special polarisation of the Special polarisation of the Special polarisation between the Special flows between the Special flows between the Special flows and the Special f	Location Colone Colone Colone	Sides	
i Anazon	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde APV therework has the provide resoluting and distribute organization with a relative to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	or source tends and the facility and seaso of calculations and	Speaker 3 1000 No. Speaker 1 1000 No. Speaker 1 1000 No. Speaker 1 1000 Annual Speaker	The control of administration of the control of administration of administration of the control of administration of the control of administration of the control of administration of administr	Location Colone Colone Colone	Sules	
ei feaser	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	re count took and the facility and sear of adulation of the facility and search of the facility	Speaker 3 - 10.00 No. Speaker 1 - 10.00 No. Seamman 1 - 10.00 Along Cisser	The Committee of Management of	Leadilles Online Online Online Keywarth versu	Sides	
ei feaser	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is replik (increasing, driven hims the ground up by the demands of last's scientists and then they wan be miligated or sciences and desliging the order paper science comp	s and information staff. It is them solve	security to the high quality of a	100 100	Speaker 1 1000 No. Searman 1 1000 To. Searma	The garden and the second and the se	Leadilles Online Online Online Keywarth versu	Sides	action of streaming capacitity
i Anazon	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	an assess took and fine facility and sear of articles (20.22) (20.22) (20.23) (20.23) (20.23) (20.23) (20.23) (20.23) (20.23) (20.23)	Speaker Speaker Speaker 1 1059 No. Resemble 10 10 10 10 10 10 10 10 10 10 10 10 10 1	TOP. TOP A CONTROL OF THE PROPERTY OF THE PRO	Lecation Ordine Ordine Ordine Keywitth vers		
ei feaser	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	manes task and fin famility and sear of establish and search and s	Synther 1 1000 No. Search 1 1100 No. Search	The contract of the contract o	Cécation Colone	ter Awaring continu	atter of streaming conjusting
i Anazon	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	season into and for famility and sear of collaboration of the famility and sear of collaboration of the famility and sear of collaboration of the famility and	Spanker 1 1000 No. Berman 1 10	The contract of matter and contract of matter and contract of matter and contract of matter and contract of the contract of th	Celestition Online Online Online Chypicath vehic Keywath I Pool Keywath I Pool Keywath I Pool	ter Awaring continu	
i Anazon	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	manes task and fin famility and speed ordinal (III) 100 (III) 100	System 1 - 1000 No. Species V - 1100 No. Species V - 1100 No. Species V - 1100 No. Species V - 1000 No. Species V	The comment of the co	Cesation Online Online Online Chine Chywldh velu Ceywidh Phil Ceywidh Phil Ceywidh Velu	ted Awarting confirms of	action of extreaming capacitity
eri Rossen	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	### (1985) ### (1985)	Speaker	The control of the co	Cesation Online Online Online Chine Chywldh velu Ceywidh Phil Ceywidh Phil Ceywidh Velu	e Anathy confirm	Interest of expensions capability Tot of the action of the company Tot of the action of the company
ei feaser	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	2000 to the banks of the banks, and see of orders of the banks of the	Total	When you design to the control of th	Coloridas Colore	te Assating confirm of or Patential space to or Patential space	uncor of executing capability for executing table from other venue for executing table from other venue
i Anazon	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	23.3 (2.3 (2.3 (2.3 (2.3 (2.3 (2.3 (2.3	Spalary	The company of the co	Césalities Ordine Ordine Ordine Ordine Ordine Organist Or	Amazing continues Palential space Palential space Palential space	union of exwanting capability for divening table from other venue
inel Reason	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among olive. There is all lear masses to Kinneledge Despit data with amiliard generalance advises and data the edges, the use of open sources or a common disjustices to open sources a common disjustices to open sources.	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	23.3 (2.3 (2.3 (2.3 (2.3 (2.3 (2.3 (2.3	Total	When you design to the control of th	Césalities Ordine Ordine Ordine Ordine Ordine Organist Or	Amazing continues Palential space Palential space Palential space	uncor of executing capability for executing table from other venue for executing table from other venue
inel Reason	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among others. There is all learn manua to Kinnelindigo Chapit dalar salit amiland generalamen advisor amil dalar the edges, there are of open sources or a common disjustions to open sources a common disjustions to open sources	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	202 100 100 100 100 100 100 100 100 100	Spalary	The company of the co	Césalities Ordine Ordine Ordine Ordine Ordine Organist Or	Awating continues of Patential space	union of exwanting capability for divening table from other venue
ini fearan	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among others. There is all learn manua to Kinnelindigo Chapit dalar salit amiland generalamen advisor amil dalar the edges, there are of open sources or a common disjustions to open sources a common disjustions to open sources	n be pitope, and Jennel, ad data specified as per the 1950's Content Nagolation By P observe is naplely increasing, officer from the ground up by the demands of last's scientists and then they was be miligated or scename and designish for only specimence comp	and information staff. It is them solve	security to the high quality of a	20.00 mm and a la halon, of and of the lates, of the lates	System S	The second secon	Lexisition Online Online Colore Color	Awating continues of Patential space	union of exwanting capability for divening table from other venue
ini fearan	Descriping information units	Proc. & Contenting profile Links of Outry processions but the updated data. Increasing upon narrow eduption at the Entitle Contenting of Europy.	Finally, I will remain the terrolle of Free John I giffed convictor's lain's The British Contegral Survey is any Concess data inharkenture in house This hall describes how we are in-	uning Criticis in the project and here easy timede the where data are of its influent Cash Wilde Affiliamment had the provide resoluting and did was the regarded or with a relation to provide impedial and industry of amenda langual advanting Crossin and ESSE technology which formation of amenda langual advanting Crossin and ESSE technology which formation providing agent natures this the organization minutes at 1 and falls about	of amilyte among others. There is all learn manua to Kinnelindigo Chapit dalar salit amiland generalamen advisor amil dalar the edges, there are of open sources or a common disjustions to open sources a common disjustions to open sources	n be pitope, and Jennel, of data specified as per the 1950's Content Nagolation By P officers in replify immuning, officers have the ground up by the demands of last's scientists and then they was be religiously as consumer and deslegies for using open source comp	and information staff. It is them solve	security to the high quality of a	20.00 mm and a la halon, of and of the lates, of the lates	Special of the Property Special of the P	The control of the co	Celestine Colone	Awaiting continues of Patiential space	union of exwanting capability for divening table from other venue

	Speaker	Title	Location	Notes
09:15 - 09:30	Leeds Organisers	Coffee and local welcome	Leeds	
09:30 - 10:00	Nick Bearman	Opening and welcome	Internet	
10:00 - 10:30	Anita Graser	Shaping Open Spatial Data Science	Internet	
10:30 - 11:00	Tim Sutton	20 Years of QGIS: Successes and Failures of a Global Phenomenon	Internet	
11:00 - 11:05	JBA	JBA local sponsor	Leeds	
11:05 - 11:30		Break (coffee and networking)		
11:30 - 12:00	Dennis Bauszus	Composing Software: Spatial for the JAMstack generation	Leeds	
12:00 - 12:30	Peter Wells	Mergin Maps: an open source platform for your field data collection	Leeds	
12:30 - 13:20		Lunch (food provided)		
13:20 - 13:30	Chris Larkin	Prioritisation of Obstruction Removal on Active Travel Networks	Leeds	Lightning Talk
13:30 - 13:40	Clara Peiret-Garcia	Developing an inclusive accessibility index for UK cities.	Leeds	Lightning Talk
13:40 - 13:50	Rachael Sanderson	Experimenting with Social Media data using Open Source Software	Leeds	Lightning Talk
13:50 - 14:10	Oliver Burdekin	FOSS meets not FOSS	Leeds	Show & Tell
14:10 - 14:40	David Wood	APIs for assessing flood risk anywhere in the world	Leeds	
14:40 - 15:10	Tomas Holderness	Serverless Tile Services in the Cloud	Leeds	
15:10 - 15:30		Break (coffee and networking)		
15:30 - 16:00	Michael West	PostGIS Out-DB Rasters in AWS Batch	Leeds	
16:00 - 16:30	Regina Obe	PostGIS Vision: Past, Present, and Future	Internet	
16:30 - 16:45	Nick Bearman	Wrap-up	Internet	

	Speaker	Title	Location	Notes						
09:30 - 10:00	Nick Bearman		Internet							
10:00 - 10:30	Anita Graser		Internet							
10:30 - 11:00	Tim Sutton	20 Years of QGIS: Successes and Failures of a Global Phenomenon	Internet							
11:00 - 11:30		BREAK								
11:30 - 12:00	Gobe Hobona	Serving executable processes on the web through open source implementations of the	OGC API - Processe	s Standard						
12:00 - 12:30	Tom Huntley	Building a Web GIS - a full stack overview.								
12:30 - 13:00		LUNCH								
13:00 - 13:30		LUNCH								
13:30 - 14:00	James Milner	TerraDraw: Drawing for any map on the web								
14:00 - 14:30	Rupert Alian	Community Mapping COVID vulnerability and Food Deserts								
14:30 - 15:00	Ibrahim Saricicek	Disaster Ninja; an open source event management solution providing information about	t disasters.							
15:00 - 15:30		BREAK								
15:30 - 16:00		NETWORKING / Q&A / Adhoc Lightening Talks								
16:00 - 16:30	Regina Obe	PostGIS Vision: Past, Present, and Future	Internet							
16:30 - 16:45	Nick Bearman	Wrap-up	Internet							
Gobe Hobona		Dr. Gobe Hobona is the OGC's Director of Product Management, Standards. In this rol			il Serving executable p API, Standards	This presentation wi	J.,	Yes	None	My preferred location is London, however I am also open to presenting in Southampton.
Gobe Hobona	Open Geospatal C	Dr. Gode Hodona is the UGC's Director of Product Management, Standards. In this rol	London	Presentations (30 m	il Serving executable pi API, Standards	This presentation wi	II Yes	Yes	None	My preferred location is London, nowever I am also open to presenting in Southampton.
						The OGC API - Pro				
James Miner	NearForm	James is a passionate web developer with a background in geospatial. He has previou	London	Presentations (30 m	TerraDraw: Drawing for any map on the we	This talk will present	Yes	Yes	No	
						The talk will go into	1			
						Attendees can also				
Rupert Allan	NHS	Rupert Allan is a designer and consultant, with a background in humanitarian logistics	London	Presentations (30 m	Community Mapping Public health uses of			Yes	No	I may have to present remotely from a laptop, as I am likely to be in the USA during the
Tom Huntley	Geoxphere	Technical Director at Geoxphere, leading the development of web based geospatial so	London	Presentations (30 m	Building a Web GIS - General talk on what	An overview of how	v Yes	Yes		
Ibrahim Saricicek	Kontur Inc.	Ibo is a geospatial expert, working mainly on full stack geospatial web development. M	London	Presentations (30 m	it Disaster Ninja; an op Data collection, risk	Disaster Ninja is an	o Yes	Yes		
1						Disaster Ninia featu	an Ol			

	Speaker	Title	Location	Notes
09:00 - 09:30	-	Coffee	In Person	
09:30 - 10:00	Nick Bearman	Opening and welcome	Internet	
10:00 - 10:30	Anita Graser	Shaping Open Spatial Data Science	Internet	
10:30 - 11:00	Tim Sutton	20 Years of QGIS: Successes and Failures of a Global Phenomenon	Internet	
11:00 - 11:30	-	Coffee	In Person	
11:30 - 12:00	TBC	A safe route to school with PgRouting and QGIS	Streamed	Southampton
12:00 - 12:30	TBC	Building a Web GIS - a full stack overview.	Streamed	London
12:30 - 13:00				
13:00 - 13:30]-	Lunch (NOT PROVIDED)	In Person	We can't afford lunch
13:30 - 14:00	TBC	Local Talks	In Person	
14:00 - 14:30	TBC	Local Talks	In Person	
14:30 - 15:00	-	Local Talks	In Person	50 mins of lightning talks + 30 mins from WSP
15:00 - 15:30	TBC	Coffee	In Person	
15:30 - 16:00	TBC	Analysing Access to UK Public Rights of Way with the QGIS Graphical Modeler	Streamed	Bristol
16:00 - 16:30	Regina Obe	PostGIS Vision: Past, Present, and Future	Internet	
16:30 - 16:45	Nick Bearman	Wrap-up	Internet	

		Speaker	Title	Location	Notes	1						
	09:30 - 10:00	Nick Rearman	Opening and welcome	Internet	Streaming In							
	10:00 - 10:30	Anita Graser	Shaping Open Spatial Data Science	Internet	Streaming in							
	10:30 - 11:00	Tim Sutton	20 Years of OGIS: Successes and Failures of a Global Phenomenon	Internet	Streaming In							
	11:00 - 11:30	Coffee				1						
	11:30 - 12:00	Andrew Bell	A safe route to school with PgRouting and QGIS	Local Talk	Streaming out	1						
		Paul Wittle &	Going open the journey so far at Dorset Council									
	12:00 - 12:30	Robert Quincey		Local Talk	Private stream, possible release after event							
	12:30 - 13:00	Lunch				1						
	13:00 - 13:30	Lunch				1						
	13:30 - 14:00	Michael Gordon /	Using the OS Data Hub to automate Open Data ETL to open source	1								
	14:00 - 14:30	Tim Martin	databases	Local Talk	Not planning on streaming out workshop							
	14:30 - 15:00	Warren Vinal	Asset Management Applications Using GeoServer	Local Talk	Streaming out							
	15:00 - 15:30	Coffee										
	15:30 - 16:00	Giovanni Allegri	State of GeoNode	Internet	Streaming In (and therefore out >))							
	16:00 - 16:30	Regina Obe	PostGIS Vision: Past, Present, and Future	Internet	Streaming In (and therefore out 5)	1						
	16:30 - 16:30		Wran-un	Internet	Streaming in							
	10.30 - 10.45	NO. Dealman	Iwiapup	Imeries	Streaming in							
9/6/2022 8:35:28		Dorset Council	Paul is a lead geospatial developer in the Dorset Council GIS team.			The journey so		This short talk is a follow on from a presentation I ran a few years ago now. During that	Yes			
9/6/2022 8:35:26	s Paul Witte	Dorset Council	Paul is a lead geologianal developer in the Dorsiet countie full's beam. We have responsibility for supporting colleagues use of GIS within a local authority setting. This includes the provision of both web and authority setting. This includes the provision of both web and to help deliver Dorsiet/Suplorer (the councils web GIS application) and also the flood reporting tool (FCRT). He is also responsible for the distribution of CGIS and GeoServer within the authority.	(Ordnance Survey)	Lightning taks (5-10 min)	far, migrating a local authority to open source	open source, Challenges,	talk Lexplained some of the issues we had faced when migrating users from applications such as Mapinfo to use QGIS. Since that talk the county council has been merged with the districts to form a new unitary council and we have found new challenges in the journey to migrate to open source.	Yes	Yes	No	No
			the distribution of QGIS and GeoServer within the authority.					I will provide a brief description of the some of the challenges we have faced with the role out of OGIS and how we have adapted our strategy to increase the speed of our migration. I will also discuss the impact that the Covid19 pandemic had on that strategy.				
9/16/2022 18:36	Andrea Aime	GeoSolutions	Open source enthusiast with strong experience in Java development		Presentations (30 min)	State of		GeoServer is a web service for publishing your geospatial data using industry standards	Yes	Yes		
			and GIS. Personal interest range from high performance software, managing large data volumes, software testing and quality, spatial data analysis algorithms, map rendering. Full time open source developer no GeoServer and GeoTools. Received the Sol Kat's OSGeo award in 2017.	(Ordnance Survey)		GeoServer		for vector, raster and mapping, as well as to process data, either in batch or on the fly. GeoSener powers a number of open source projects like GeoNode and geOrchestra and its widely used throughout the world by organizations to manage, disseminate and analyze data at scale.				
			Received the Sol Katz's OSGeo award in 2017.					This presentation provides an update on our community as well as reviews of the new and noteworthy features for the latest releases. In particular, we will showcase new features				
								landed in 2.20 and 2.21, as well as a preview of what we have in store for 2.22 (to be released in September 2022). Attend this talk for a cheerful update on what is happening with this popular OSGeo				
								project, whether you are an expert user, a developer, or simply curious what GeoServer can do for you.				
9/16/2022 18:37	Giovanni Allegri	GeoSolutions	I've started my career as a DISIED data scientist and Spatial Data infrastructures specialist, based for the most part on open source technologies and business models. In this context, I've worked for several public institutions and private companies, as a consultant, developer and solutions provider.	Southampton (Ordnance Survey)	Presentations (30 min)	State of GeoNode		GeoNode is a Web Spatial Content Management System based entirely on Open Source tools whose purpose is to promote the shafing of data and their management in a simple environment where even non-expert users of GIS technologies can view, edit, manage, and share spatial data, maps, prints and documents attached.	Yes	Yes		
			Over the years my job and interests expanded into the broader fields of a solution architect, embracing and deepening engineering and "soft skills" methodologies to lead projects along all their lifecycle.					This presentation provides a summary of new features added to GeoNode in the year up to the latest releases of GeoNode together with a glimpse of what we have planned for next year and beyond; straight from the core developers.				
			The had the opportunity to contribute to and lead the development chain of several projects, ranging from mobile apps and web platforms to data infrastructures and distributed data processing					The purpose of this presentation is to introduce the attendees to those which are the GeoNode current capabilities and to some practical use cases of particular interest in order to also highlight the possibility of customization and integration. Finally, we will provide a summary of new features added to GeoNode in the last release up to the latest				
			platements to data immanductories and costrolled data processing pipelines. Whatever the kind of product it is, I enjoy translating a customer idea into an effective solution. My current main technical focus is software design and product					provise a summary or new requires added to develope it the task needed up to the attest releases of GeoNode together with a glimpse of what we have planned for next year and beyond, straight from the core developers.				
			management. Hobbies? Sound design, music technologies, and programming.									
9/6/2022 8:24:10	Paul Wittle & Rob Quincey	Dorset Council	Paul and Rob are web developers in the GIS team at Dorset Council. We have been working at the council for many years now delivering solutions such as DorsetExplorer (the councils web mapping solution) and a number of geospatial reporting tools	Southampton (Ordnance Survey)	Show and tell (short & variable)	Open development at Dorset Council	Open Source Development, public sector, . NET.	We are currently working on moving our geospatial web development projects to open source and we are planning on releasing brand new versions of each product as part of this process. This show and tell task will involve a brief demonstration of the new GI Framework Macs application.	Yes	No	No	This talk is only to be used if there is a shortage of talks. The development work is very active at the moment so this conference may be a bit early for us to run this talk. We think people will be interested in what we have to present but we expect to run better talks on it next year. This is with 'I ye out no to streaming to other venues as we think it
			covering flooding and wildfires.				Typescript, Postgres	This is a .NET C# web project which we hope will create an entry point for open geospatial that is suited to companies and local authorities that prefer Microsoft based schnologies.				too early for that at this stage. The length / detail of the talk can be adjusted as needed once we know what other
								We know there are a fantastic range of existing options available however many of these are Java based so we hope the work we are doing will compliment and build on the existing products to help open up FOSS46 technologies to areas that perhaps have not				talks have been submitted.
								yet explored the options out there. This builds on our experiences of migrating from proprietary GIS solutions to free and open source within local government.				
9/21/2022 8:51:1	Michael Gordon	Ordnance Survey	I'm the Product Lead for the OS Data Hub, Tim Martin is the lead for	Southamoton	Workshops (1hr or 2hr)	Using the OS	OS Onen Data	We'll cover how to access OS onen data use the Downloads API to automate download of	Ves	Yes	No	We can also cover access to OpenData via various APIs and coding examples in
	/ Tim Martin	,	the Consultancy and Technical Services learn.	(Ordnance Survey)			automation of loading and access in open source software	the data and loading into PostGres as well others ways to access OS open data in popular open source software		-		various web libraries so depending on interest we can expand or shrink the workshop as needed
			Envitia is a geospatial data analytics company, delivering high- quality data solutions for Government and Defence clients,			databases						
			accelerating their 'Data journey'. Everything happens somewhere and location connects the physical and digital worlds. Understanding this relationship will deliver insight you wouldn't otherwise know exists. Getting to that insight requires overcoming complex big data					This talk will discuss two Asset Management web applications addressing very different use cases: - Property Asset Management				
			Getting to that insight requires overcoming complex big data challenges with specialist geospatial data software and expertise. At Envitia, we call this getting the data foundations right. Data foundations underpin the successful exploitation of data including data analytics, Al & ML. Envitia's services provide a range of			Asset Management		 Maritime Asset Management It will cover how GeoServer was used to visualise and disseminate geospatial data, via OGC web services, WMS, WMTS, WFS, WCS and vector titles. 				
10/14/2022 17:5	1Waren Vinall	Envitia Ltd	capabilities to provide these data foundations and solve thesedata challenges.	Southampton (Ordnance Survey)	Presentations (30 min)	Applications Using GeoServer	Use Cases and Applications	We will explore why GeoServer was the tool of choice, and what benefits and potential draw backs it offers.	Yes	Yes	N/A	
			Working with the opensource GIS stack for 15 years. Andrew has worked in developing innovative spatially intelligent solutions founded on the building blocks of PostGIS and QGIS. With a base of experience of working in local government GIS departments he				Demonstrate use of	The talk will demonstrate a case study of an office-based tool using QGIS built for a Local Authority to calculate the distance of individual journeys from home to school. The solution is cowered by dynamic layers from PostQIS which use Porcuring and a custom				
		Oceanwise /	provides consultancy in open source GIS, and local government GIS strategy. As keen sallor Andrew has more recently worked for Oceanwise working hydrographic and bathymetric data and data	Southampton (Ordnance		school with PgRouting and	PgRouting and PostGIS dynamic layers	validation is powered by dynamic uples in our Postson's which take "globaling airs a castum walking route network to make calculations. As well as showing how the tool operates from the user's perspective the talk delives into database scripting to see how pyrousing and other PostgreSGU tools are utilised.				
10/14/2022 18:0	Andrew Bell	Geoascent	processing for the marine sector.	Survey)	20 minutes + questions	QGIS	in QGIS.		No	Yes	No	No