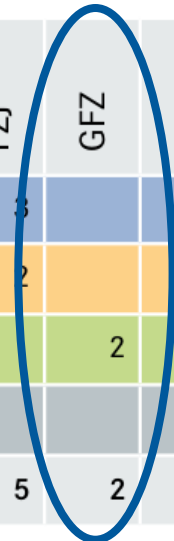


HIFIS Beiträge des GFZ

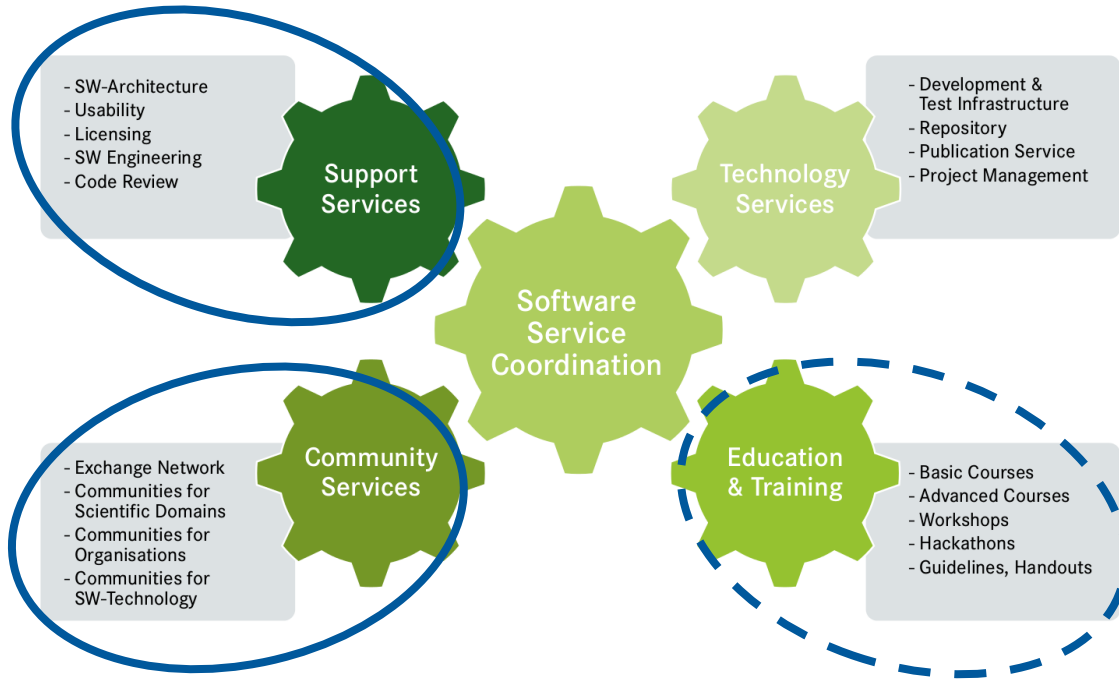
Martin Hammitzsch
HIFIS Kick-off, 29. Januar 2019, Berlin

Verortung GFZ in HIFIS

		Summe	AWI	DESY	DLR	DKFZ	FZJ	GFZ	HMGU	HZB	HZDR	KIT	UFZ
WP1	Cloud Services	17	1	3		2	3		1	4		3	
WP 2	Backbone Services	11	1	3		1	2		1		1	2	
WP 3	Software Services	11			3	1		2			4		1
WP 4	Administration	4		1,5						1	1,5		
	Summen	43	2	7,5	3	4	5	2	2	5	6,5	5	1



Leistungsbeschreibung GFZ



Offiziell

- 3.3 Support Services
- 3.4 Community Services

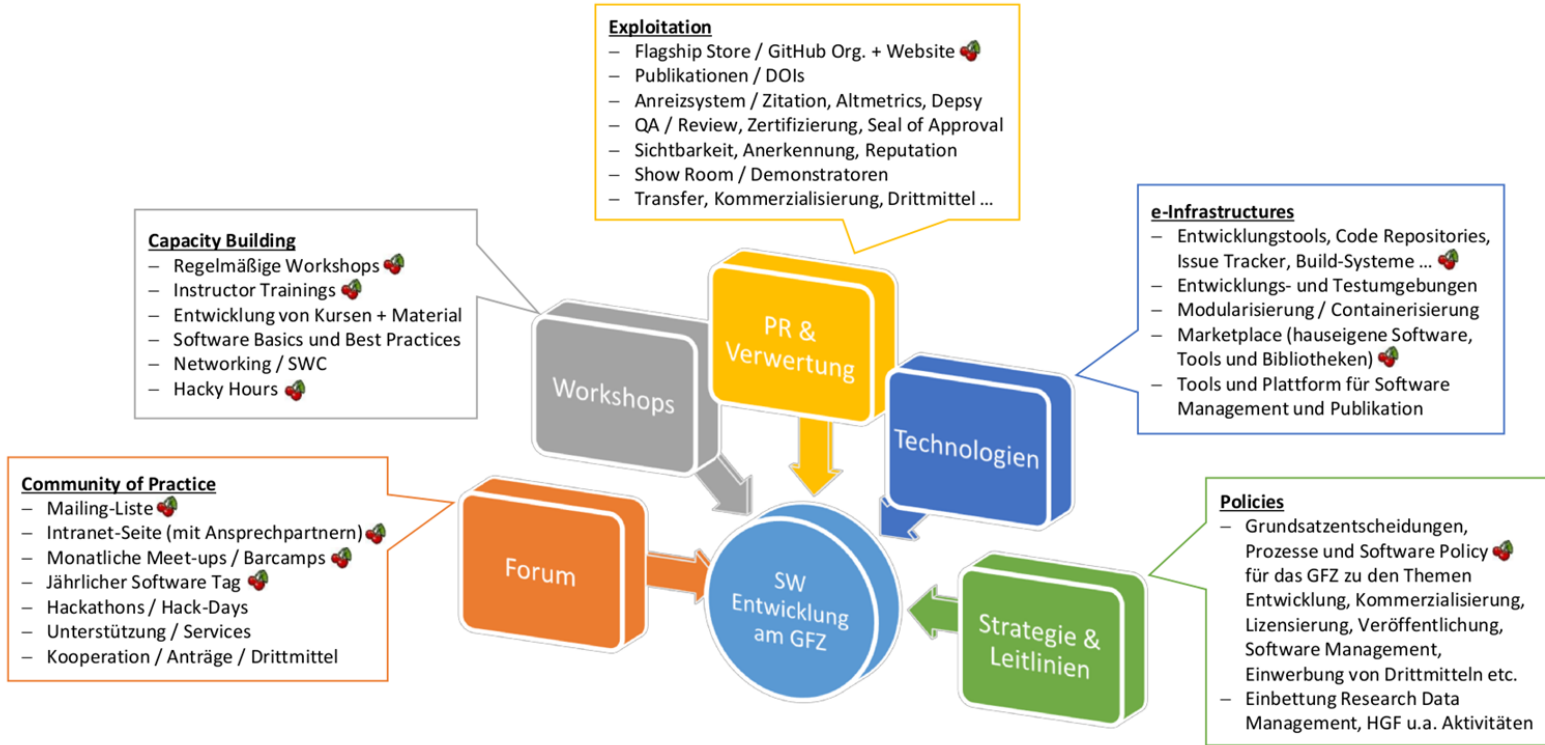
Darüber hinaus

- 3.1 Training und Guidelines

Unter Vorbehalt

- 3.2 Technology Services

Maßnahmen, Aktivitäten des GFZ



3.3 Support Services 1/2

- GFZ eScience-Zentrum seit 2018 für Bereitstellung von Dienstleistungen
- Beratung und Unterstützung, z.B. bei:
 - der Gestaltung von Softwarethemen in Anträgen und Ausschreibungen
 - der Erstellung von Daten- und Softwaremanagementplänen und Daten- und Software Policies
 - der Durchführung von Projekten mit Softwareentwicklungsanteil
 - dem Management von Softwareprojekten
 - der Erarbeitung von Software-Architekturen
 - dem Einsatz von Standards (Daten, Metadaten, Schnittstellen)
 - der Datenintegration
 - der Umsetzung der FAIR Prinzipien bei der Datenakquise, -prozessierung, -analyse und Qualitätsmanagement
 - Weitergabe und Zugänglichmachung von Software
 - Vergabe von Nutzungsrechten und Einsatz von Lizenz sowie Lizenzkompatibilitätsprüfung
 - Anwendung und Umsetzung von Best Practices bei der Softwareentwicklung (Veröffentlichung und Verwertung von Software)



3.3 Support Services 2/2

- Kooperation in Projekten und bei Forschungsaktivitäten mit Softwareentwicklungsanteil
 - Softwareentwicklung innerhalb von Projekten
 - Bereitstellung und Anpassung von Software-Lösungen für das Datenmanagement
 - Umsetzung von Web-Anwendungen für wissenschaftliche Geodaten
 - Konzeption und, Implementierung und Betrieb von Service-Plattformen mit standardbasierten Schnittstellen
 - Visualisierung von Geodaten
 - ...



3.3 Community Services 1/1

- GFZ Gestaltung und Beteiligung in
 - Helmholtz Forschungsbereich Erde und Umwelt
 - Zentren-übergreifende Maßnahmen und Vorhaben wie MOSES, TERENO, DE und ESM
 - POF-IV Topics
 - Geohazards (Topic 3), Georesources for the Energy Transition (Topic 8), Dynamics of terrestrial Environment under Global and Climate Change (Topic 5)
 - Ocean and Cryosphere (Topic 2), Atmosphere (Topic 1)
- Aufbau der nationalen de-RSE Community inkl. Organisation von Veranstaltungen wie deRSE19 Konferenz, GIS Day etc.
- RSE-Community am Campus Telegrafenberg mit AWI und PIK sowie über Geo.X mit Potsdamer und Berliner Hochschulen
 - Austauschnetzwerk vor allem durch konkrete Aktivitäten wie SWC Workshops und Hacky Hour
- **GFZ eigene RSE-Community**
→ 3.3 Support sowie 3.2 Training, Education and Guidelines sind Bestandteil der 3.3 Community Services



3.2 Training, Education and Guidelines

1 / 5

The screenshot displays two browser windows. The left window shows the 'Past Workshops' page on the Software Carpentry website. The right window shows an event announcement for a 'Carpentries-based Workshop "FAIR Data and Software"'.

Software Carpentry Website (Left Window):

- URL: <https://software-carpentry.org/workshops/past/>
- Navigation: HOME, ABOUT, WORKSHOPS, LESSONS, GET INVOLVED, BLOG, CONTACT
- Logo: software carpentry
- Slogan: Teaching basic lab skills for research computing
- Section: Past Workshops
- Map of Potsdam with a popup listing workshops:
 - Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences: Sep 23 - 25, 2015
 - Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences: Oct 21 - 23, 2015
 - Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences: Dec 14 - 16, 2015
 - Albert Einstein Science Park, Potsdam: May 15 - 16, 2017
 - Albert Einstein Science Park, Potsdam: May 17 - 18, 2017
 - Albert Einstein Science Park, Potsdam, Germany: Feb 22 - 23, 2018
 - Albert Einstein Science Park, Potsdam, Germany: Apr 25 - 26, 2018
- Footer: A row of flags representing various countries.

Event Announcement (Right Window):

- URL: <https://events.tib.eu/fair-data-software/>
- Event Title: Carpentries-based Workshop "FAIR Data and Software"
- Dates: July 9 - 13, 2018 in Hannover
- Section: Welcome to the "FAIR Data and Software" Workshop
- Section: July 9-13, 2018 in Hannover
- Text: "This workshop aims to train junior scientists in implementing the FAIR principles for research data & software management & development. We want to help you apply good practices in Git and R for preparing, publishing and archiving your research."
- Text: "We approximately focussed on one topic / principle per day, introducing its reasoning, benefits, and (differing and/or shared) implications for proper research data/software management/development together with the learners. We followed-up the theory-learning introductions in the mornings with discussions and live-coding sessions, using some (Software & Data) Carpentry materials to illustrate and practice a principle's implementation in the STEM disciplines of (MINT-Fächer)." Regardless of discipline, learners were encouraged to bring questions about their own data and source code, which we tried to answer during the workshop.
- Text: "This is a continuation of our experimental format in 2018 that contextualised the highly practical lesson material from the Software & Data Carpentries & with the FAIR principles."
- Section: For whom?
- Text: "Junior scientists who wish to excel at implementing the FAIR principles in their R programming. You need to have some previous knowledge of Git and R."
- Section: Costs
- Text: "Participation is free of charge. It is part of an ideas competition supported by the Jülich Research Centre & a grant by the German Federal Ministry of Education and Research (BMBWF). However, participants need to organise and pay for travel and accommodation themselves."
- Section: Requirements
- Text: "A basic knowledge of Git and R, plus your own mobile computer. If you are interested in learning these basics, please consider a regular Software & Data Carpentry workshop, or work through their material in a self-paced manner."

3.2 Training, Education and Guidelines

2/5

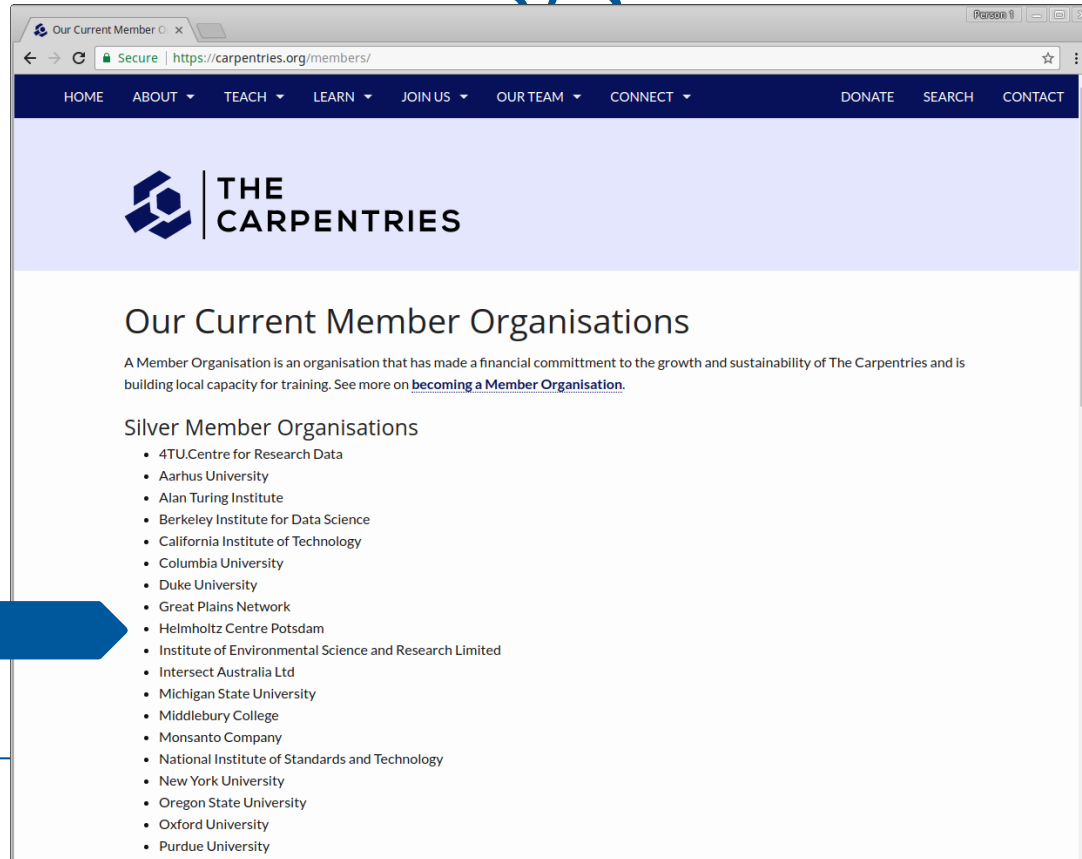
- Software Carpentry Instructors am Campus Telegrafenberg werden und wurden im Rahmen eines Online Instructor Trainings zertifiziert und beteiligen sich bei der Durchführung an Software Carpentry Workshops

- Daniel Beiter (GFZ, 2018)
- Peter Evans (GFZ, 2017)
- Hannes Fuchs (GFZ, 2019)
- Martin Hammitzsch (GFZ, 2016)
- Sebastian Heimann (GFZ, 2019)
- Marius Isken (GFZ, 2018)
- Stefan Lüttke (GFZ, 2017)
- Marvin Reich (GFZ, 2017)
- Sven Reissland (GFZ, 2016)
- ...
- Robert Gieseke (PIK, 2018)
- Frank Hellmann (PIK, 2019)
- Tim Kittel (PIK, 2018)
- Joachim Krois (FU Berlin, 2018)



3.2 Training, Education and Guidelines

3 / 5



The screenshot shows a web browser window displaying the 'Our Current Member Organisations' page on the The Carpentries website. The browser's address bar shows the URL 'https://carpentries.org/members/'. The website's navigation menu includes 'HOME', 'ABOUT', 'TEACH', 'LEARN', 'JOIN US', 'OUR TEAM', 'CONNECT', 'DONATE', 'SEARCH', and 'CONTACT'. The main heading is 'Our Current Member Organisations', followed by a definition of a Member Organisation. Below this, a section titled 'Silver Member Organisations' lists 20 member organizations, with a blue arrow pointing to the list.

Our Current Member Organisations

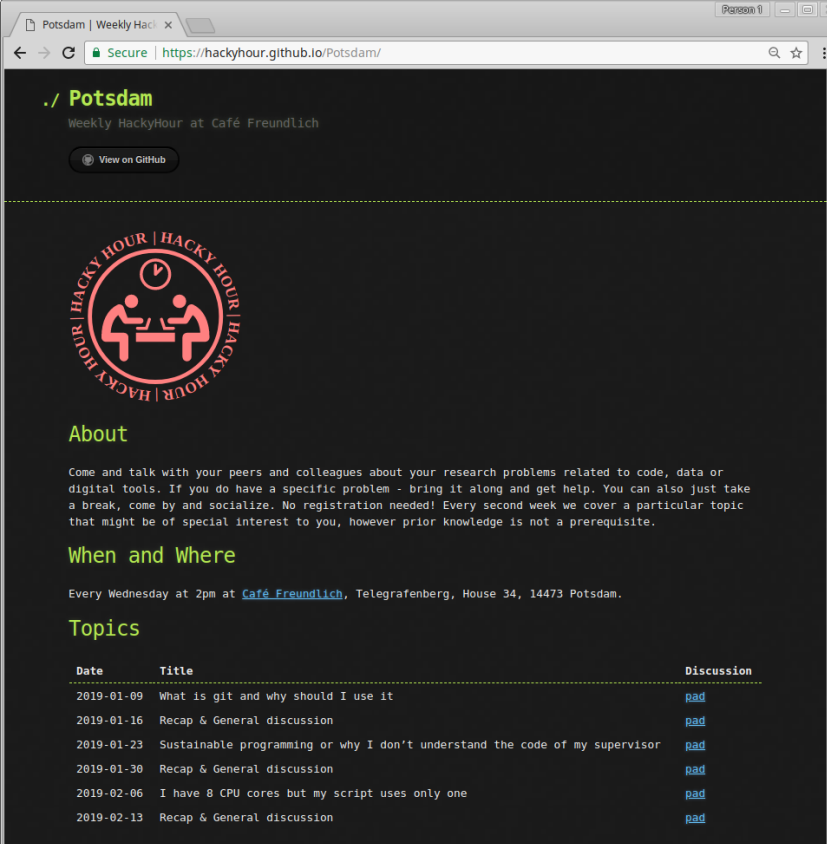
A Member Organisation is an organisation that has made a financial commitment to the growth and sustainability of The Carpentries and is building local capacity for training. See more on [becoming a Member Organisation](#).

Silver Member Organisations

- 4TU.Centre for Research Data
- Aarhus University
- Alan Turing Institute
- Berkeley Institute for Data Science
- California Institute of Technology
- Columbia University
- Duke University
- Great Plains Network
- Helmholtz Centre Potsdam
- Institute of Environmental Science and Research Limited
- Intersect Australia Ltd
- Michigan State University
- Middlebury College
- Monsanto Company
- National Institute of Standards and Technology
- New York University
- Oregon State University
- Oxford University
- Purdue University


3.2 Training, Education and Guidelines

4/5



./ **Potsdam**
Weekly HackyHour at Café Freundlich

[View on Github](#)



About

Come and talk with your peers and colleagues about your research problems related to code, data or digital tools. If you do have a specific problem - bring it along and get help. You can also just take a break, come by and socialize. No registration needed! Every second week we cover a particular topic that might be of special interest to you, however prior knowledge is not a prerequisite.

When and Where

Every Wednesday at 2pm at [Café Freundlich](#), Telegrafenberg, House 34, 14473 Potsdam.

Topics

Date	Title	Discussion
2019-01-09	What is git and why should I use it	pad
2019-01-16	Recap & General discussion	pad
2019-01-23	Sustainable programming or why I don't understand the code of my supervisor	pad
2019-01-30	Recap & General discussion	pad
2019-02-06	I have 8 CPU cores but my script uses only one	pad
2019-02-13	Recap & General discussion	pad

3.2 Training, Education and Guidelines

5/5

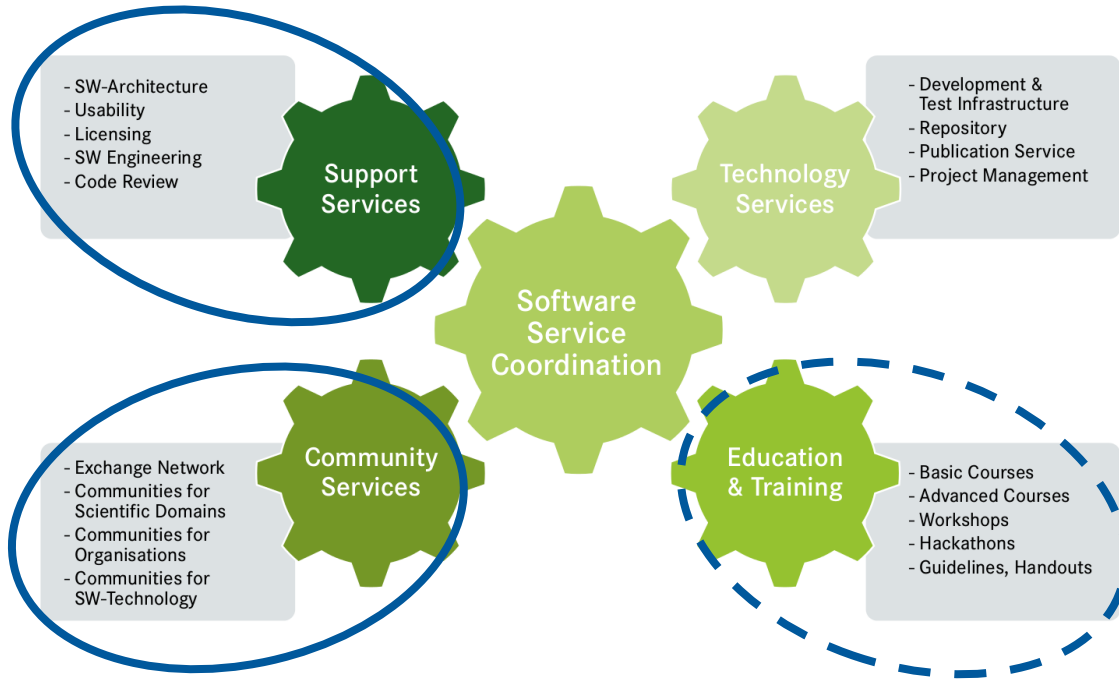
- AK Softwareentwicklung am GFZ für Entwicklung, Einführung und Gestaltung einheitlicher und abgestimmter Prozesse
- Ergebnisse
 - Leitfaden zur Weitergabe und Zugänglichmachung von Software, Unterteilung in Fallgruppen
 - Fast-Track-Verfahren für die Weitergabe und Zugänglichmachung von Software
 - Formular zur Mitteilung der Weitergabe und Zugänglichmachung von Software
 - Ausfüllhilfe für die Mitteilung zur Weitergabe und Zugänglichmachung von Software
- Aktuelle Arbeit
 - Hilfestellung zur Anwendung und Umsetzung von Best Practices bei der Softwareentwicklung
 - GFZ Lizenzstrategie für Software
 - GFZ Verwertungsstrategie für Software
 - Leitfaden für die Publikation von Software mit DOIs

3.2 Technology Services

- Infrastruktur für Softwareentwicklung
 - GitLab + CI
 - Virtual Machines
 - On-demand Container Platforms
 - Backup and Recovery
 - ...



Leistungsbeschreibung GFZ



Offiziell

- 3.3 Support Services
- 3.4 Community Services

Darüber hinaus

- 3.1 Training und Guidelines

Unter Vorbehalt

- 3.2 Technology Services