



HYPER CONSENT (HC)

Trustful handling of person- and customer-related data:
Compliant (GDPR, TCF), transparent, automated, cross companies



LIFE IS FOR SHARING.

Jörg Steinbeck
Martin Kurze

2023/01



Did you know - there is a standard language for GDPR definition?

The mission of the W3C Data Privacy Vocabularies and Controls CG (DPVCG) is to develop a taxonomy of privacy and data protection related terms, which include in particular terms from the new European [General Data Protection Regulation \(GDPR\)](#), such as a taxonomy of personal data as well as a classification of purposes (i.e., purposes for data collection), and events of disclosures, consent, and processing such personal data.

W3C's DPV - vocabulary for consent handling



[Home](#) / [Data Privacy Vocabularies...](#)

DATA PRIVACY VOCABULARY COMMUNITY GROUP

The mission of the W3C Data Privacy Vocabulary Community Group is to develop a taxonomy of privacy and data protection terms from the new European data protection laws (such as a taxonomy of personal data and its purposes for data collection), and even more.

1. Base Vocabulary

1.1 Classes

- 1.1.1 Data Controller
- 1.1.2 Data Subject
- 1.1.3 Data Subject Right
- 1.1.4 Legal Basis
- 1.1.5 Personal Data
- 1.1.6 Personal Data Handling
- 1.1.7 Processing
- 1.1.8 Purpose
- 1.1.9 Recipient
- 1.1.10 Right
- 1.1.11 Risk
- 1.1.12 Technical and Organisational Measure

11. Legal Bases

11.1 Classes

- 11.1.1 **Consent**
- 11.1.2 Contract
- 11.1.3 Contract Performance
- 11.1.4 Data Transfer Legal Basis
- 11.1.5 Enter Into Contract
- 11.1.6 Legal Basis
- 11.1.7 Legal Obligation
- 11.1.8 Legitimate Interest
- 11.1.9 Legitimate Interest of Controller
- 11.1.10 Legitimate Interest of Third Party
- 11.1.11 Official Authority of Controller
- 11.1.12 Public Interest
- 11.1.13 Vital Interest
- 11.1.14 Vital Interest of Data Subject
- 11.1.15 Vital Interest of Natural Person
- 11.2 Properties
- 11.2.1 has legal basis
- 11.3 **Consent**
- 11.3.1 Properties
- 11.3.1.1 has **consent** notice
- 11.3.1.2 has expiry
- 11.3.1.3 has expiry condition
- 11.3.1.4 has expiry time

6. Purposes

6.1 Classes

- 6.1.1 Academic Research
- 6.1.2 Access Control
- 6.1.3 Advertising
- 6.1.4 Commercial Interest
- 6.1.5 Commercial Research
- 6.1.6 Communication for Customer Care
- 6.1.7 Context
- 6.1.8 Create Event Recommendations
- 6.1.9 Create Personalized Recommendations
- 6.1.10 Create Product Recommendations
- 6.1.11 Customer Care

7. Processing Categories

7.1 Classes

- 7.1.1 Acquire
- 7.1.2 Adapt
- 7.1.3 Align
- 7.1.4 Alter
- 7.1.5 Analyse
- 7.1.6 Anonymise
- 7.1.7 Automated Decision Making
- 7.1.8 Collect
- 7.1.9 Combine

10. Consent

10.1 Classes

- 10.1.1 Consent
- 10.2 Properties
- 10.2.1 has consent notice
- 10.2.2 has expiry
- 10.2.3 has expiry condition
- 10.2.4 has expiry time
- 10.2.5 has provision by
- 10.2.6 has provision by justification

§ 6.1.9 Create Personalized Recommendations

Term:	<i>CreatePersonalizedRecommendations</i>
Description:	create and provide personalised recommendations
Subclass Of:	dpv:ServicePersonalization
Superclass Of:	dpv>CreateEventRecommendations , dpv>CreateProductRecommendations
Source:	SPECIAL Project
Created:	2019-11-26
Contributor(s):	Harshvardhan J. Pandit, Rudy Jacob

§ 7.1.5 Analyse

Term:	<i>Analyse</i>
Description:	to study or examine the data in detail
Subclass Of:	dpv:Use
Source:	SPECIAL Project
Created:	2019-05-07
See Also:	svpr:Analyse

§ 10.2.1 has consent notice

Term:	<i>hasConsentNotice</i>
Description:	Specifies the notice provided in context of consent
Status:	accepted
Created:	2019-04-05
Contributor(s):	Bud Bruegger, Harshvardhan J. Pandit, Mark Lizar

WHY BOTHER about yet another standard in the industry?

It forms an opportunity for new levels of
automation, collaboration & usage
in
ANY

Data enabled or driven Business Model

With partners in the EU, we created a machine readable language based on the DPV

- Hyper Consents – What
- Hyper Consents – Why
- Hyper Consents – How

DT privacy standard as HC-POLICY

InfoService einstellen

Auf diesen Betreuungswegen kann Sie die Telekom für Information und Beratung kontaktieren

InfoService der Telekom Deutschland GmbH und der T-Systems International GmbH

☒ Ich bin damit einverstanden, dass meine Vertragsdaten und Nutzungsdaten der von mir genutzten Produkte und Dienste der Telekom Deutschland GmbH und der T-Systems International GmbH sowie Standortdaten zusammengeführt, ausgetauscht und bis zum Ende des Kalenderjahres, das auf die Beendigung des jeweiligen Vertrages folgt, zur individuellen Beratung verwendet werden.

Ich kann meine Einwilligung jederzeit widerrufen. Die Hinweise zum Widerrufsrecht, die Begriffsdefinitionen sowie den Datenschutzhinweis habe ich zur Kenntnis genommen.

Auf Basis der oben genannten kundenindividuell aufbereiteten Daten möchte ich Informationen/ Angebote von der Telekom Deutschland GmbH und T-Systems International GmbH über Produkte und Dienste direkt per

☒ Telefon

☒ E-Mail

☒ SMS/MMS

erhalten.

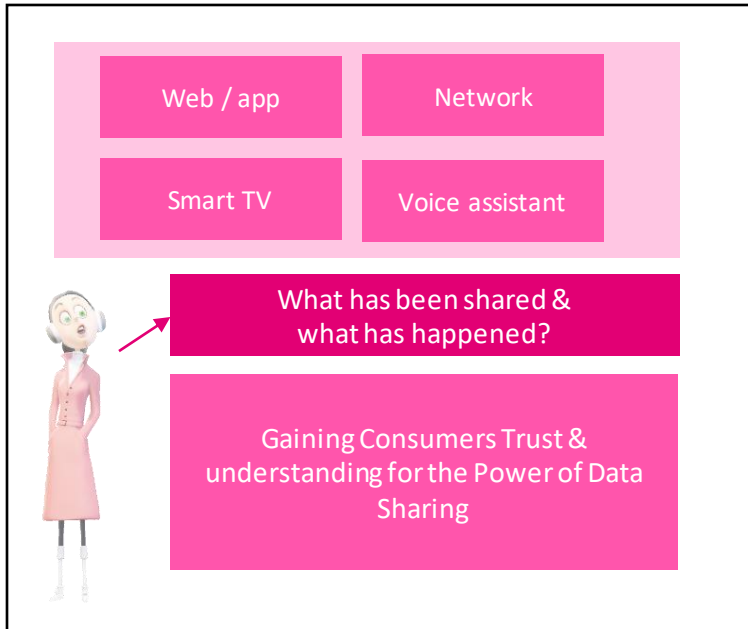
Ich kann meine Einwilligungen jederzeit widerrufen.

absenden

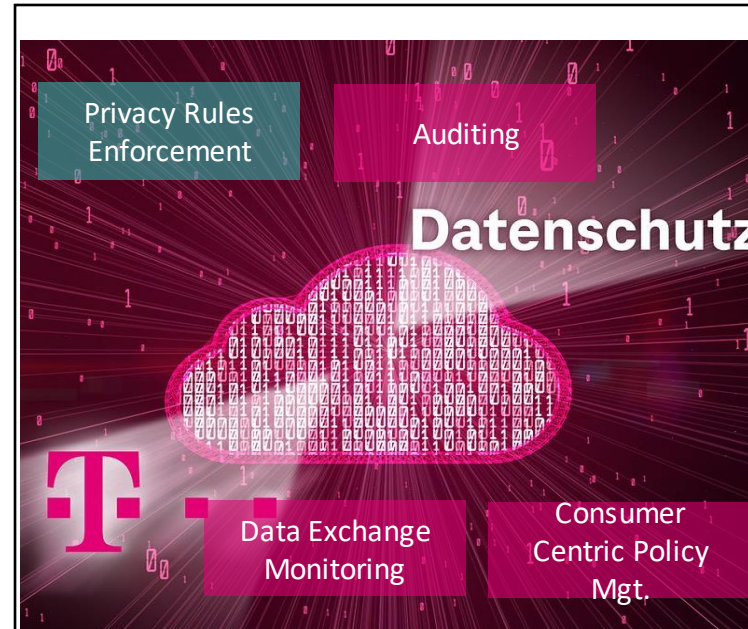
```
"svl": "http://www.specialprivacy.eu/vocabs/locations#",
"dt": "DT-EXAMPLE-URI"
},
"@ontologies": [
  "dt-ontology.owl"
],
"@policySet": [
  {
    "@id": "org:dt:example-policy:draft",
    "title": "KEK (Telekom Konzern Einwilligungs-Klausel)",
    "description": "Ich bin damit einverstanden, dass meine Vertragsdaten Produkte und Dienste der Telekom Deutschland GmbH und der T-Systems International GmbH zusammengeführt, ausgetauscht und bis zum Ende des Kalenderjahres, das folgt, zur individuellen Beratung verwendet wird",
    "controller": "org:company:telekom_deutschland",
    "dataSubject": "8723748293749283",
    "dpv:hasPersonalDataCategory": [
      { "@instance": "dt:mobile:0049123456789" },
      { "@class": "dt:ContactEmail" },
      { "@class": "dt:ContactSMS" },
      { "@class": "dpv:Location" },
      { "@class": "dpv:Behavioral" },
      { "@class": "dpv:Purchase" },
      { "@class": "dpv:Identifying" }
    ],
    "dpv:hasPurpose": [
      { "@class": "dpv:Advertising" },
      { "@class": "dpv:CustomerCare" }
    ],
    "dpv:hasProcessing": [],
    "dpv:hasStorage": {
      "dpv:hasDuration": {},
      "dpv:hasLocation": { "@class": "svl:ControllerServers" }
    },
    "dpv:Recipient": {
      "@instance": "org:company:telekom_deutschland",
      "@instance": "org:company:t-systems_international"
    }
  }
],
}
```

TELEKOM's DATA USAGE PARADIGM

OMNI CHANNEL DATA USAGE



BE IN CONTROL AT all TIMES



ENABLE AUTOMATED xCOMPANY USAGE & AUDITING

HUMAN	MACHINE
All the data collected (about my device, location, interactions and e-mail address) while using this app will be	"dov:PersonalDataCategory": ["dov:DeviceBased", "dov:Location", "dov:ServiceConsumptionBehavior", "dov:EmailAddress"]
used and processed in various ways (collected, analysed, derived, stored etc.	"dov:Processing": ["dov:Analyse", "dov:Alter", "dov:Collect", "dov:Denie", "dov:Erase", "dov:Move", "dov:Profiling", "dov:Store"]
by BiteMarkCompany	"dov:Recipient": { "type": "schema:Organization", "legalName": "BiteMarkCompany LLC", "name": "BiteMarkCompany", "description": "...", "address": "...Germany...", "vatID": "...", "identifier": "https://bitemarkcompany.com", "url": "https://bitemarkcompany.com"
to optimize the provided service and	"dov:Purpose": "dov:ServiceOptimization"
stored as long as the app is installed on a user device	"dov:StorageRestriction": { "dov:StorageDuration": "svdu:Indefinitely", "dov:StorageRestriction": { "dov:StorageLocation": "svl:ControllerServers"
on BiteMarkCompany's data centers in Germany.	
T.. LIFE IS FOR SHARING.	PMC - Privacy Machine Code

DT NATCOS & trusted partners automate consumer data exchange via
HYPER CONSENT (HC) LANGUAGE

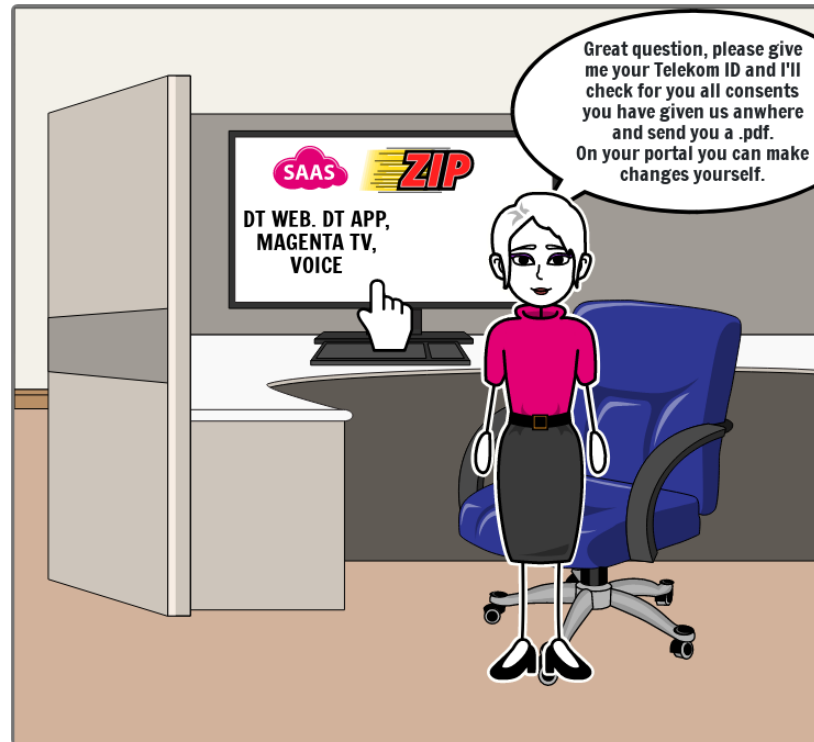
HC PRODUCT - A GDPR COMPLIANT SAAS

UC: CUSTOMER IS IN CONTROL OF HIS DATA

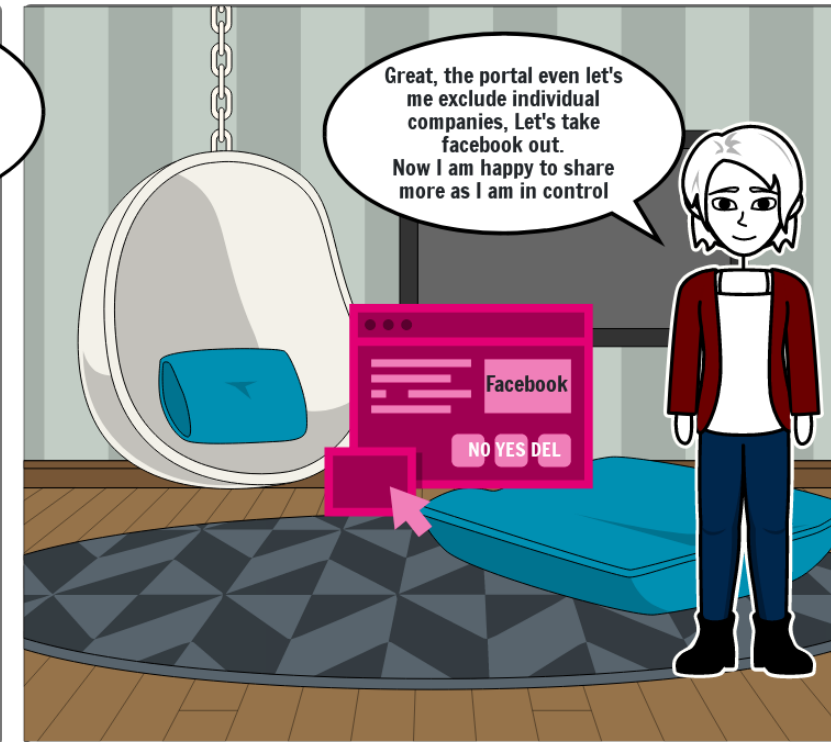
Call center helps customer to understand consents given



SIMPLE QUESTION – COMPLEX ANSWER:
DT consents are numerous and are stored in multiple systems.

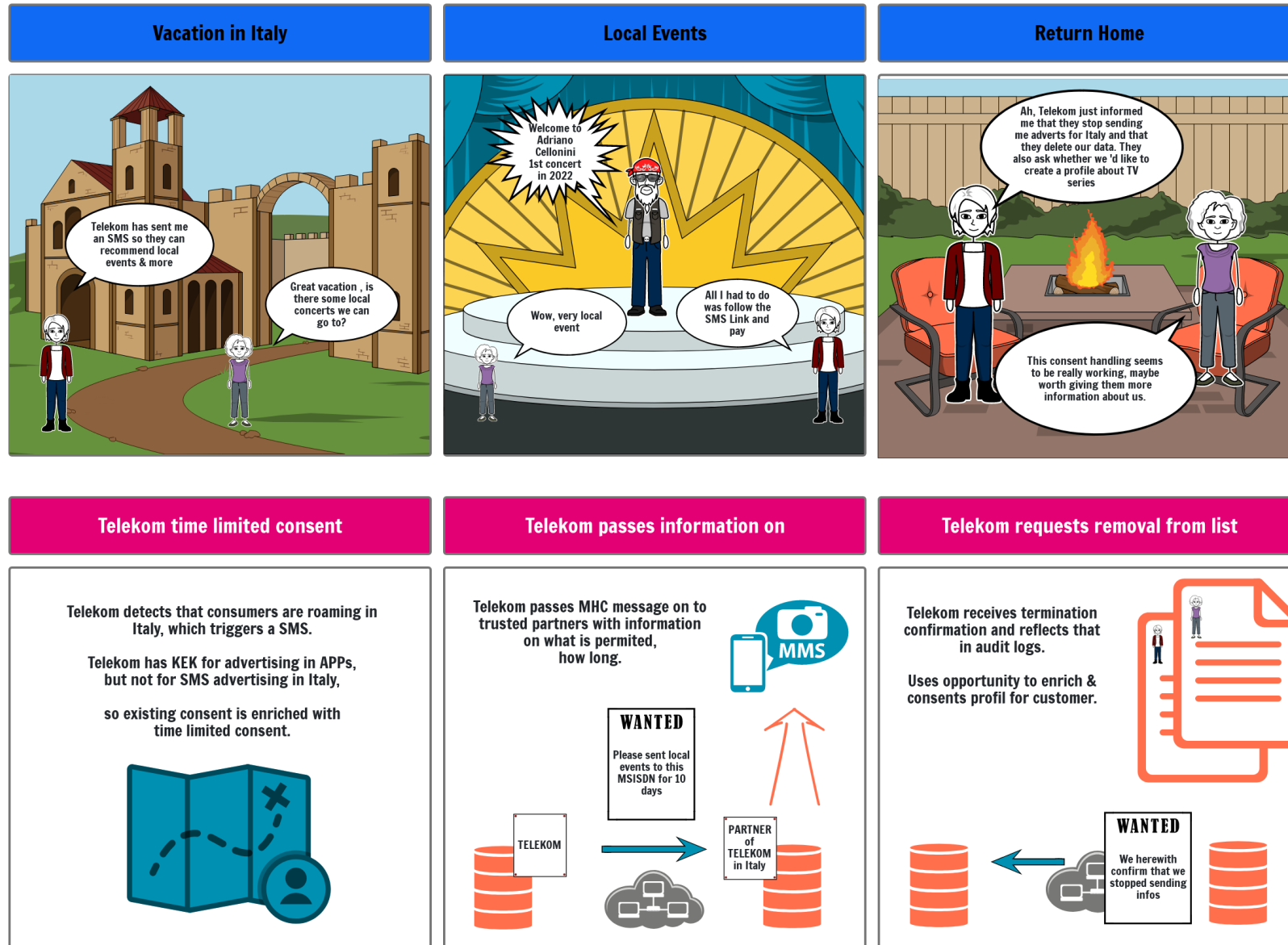


ONE CLICK ANSWER:
HC allows to efficiently query all consent systems as it is a standard to specify consents.



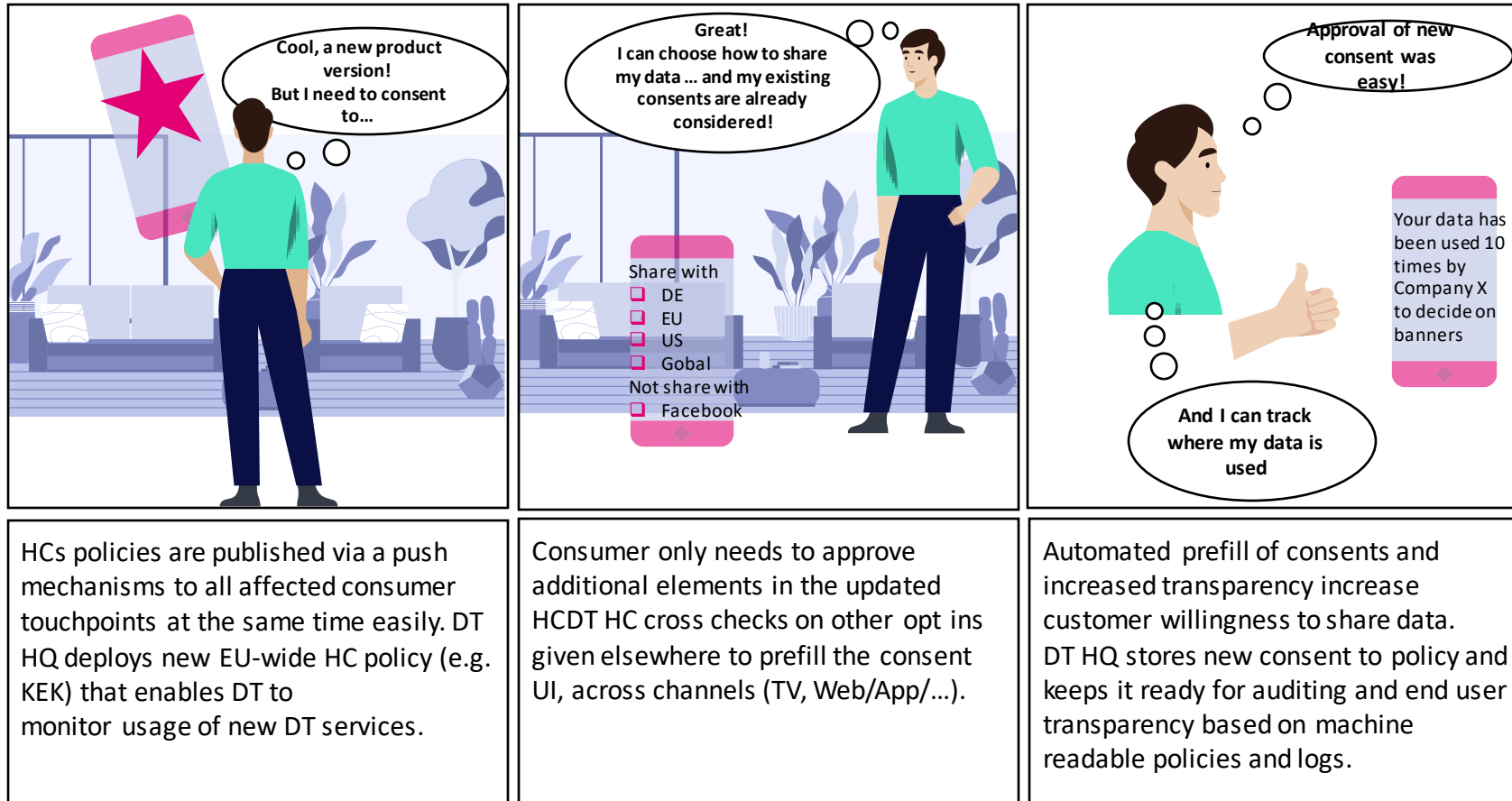
EXCEED EXPECTATION:
Thanks to HC, DT can easily show consents in any portal.

UC: Partner Integration enabled by HCs exchange



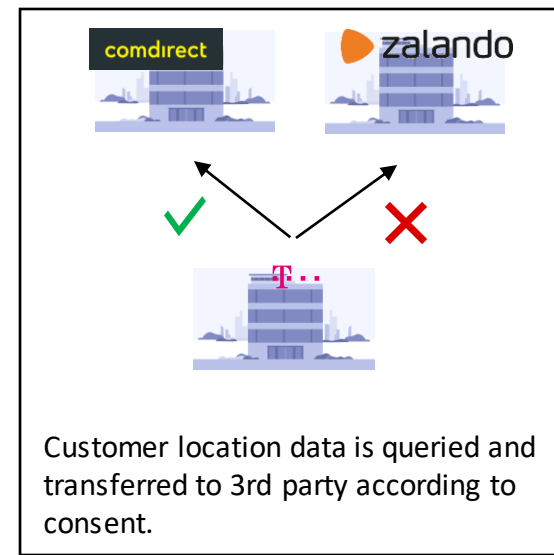
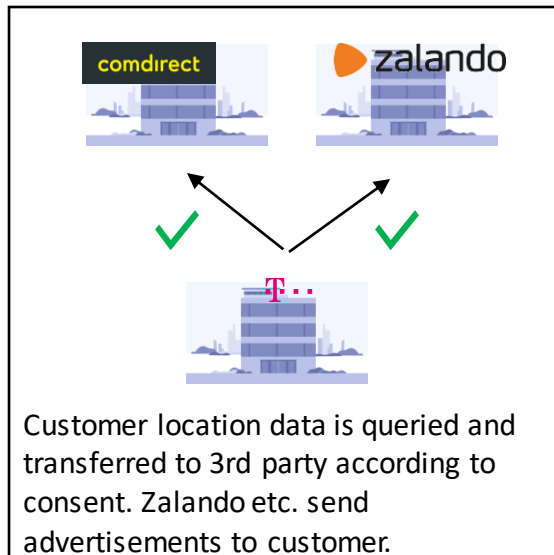
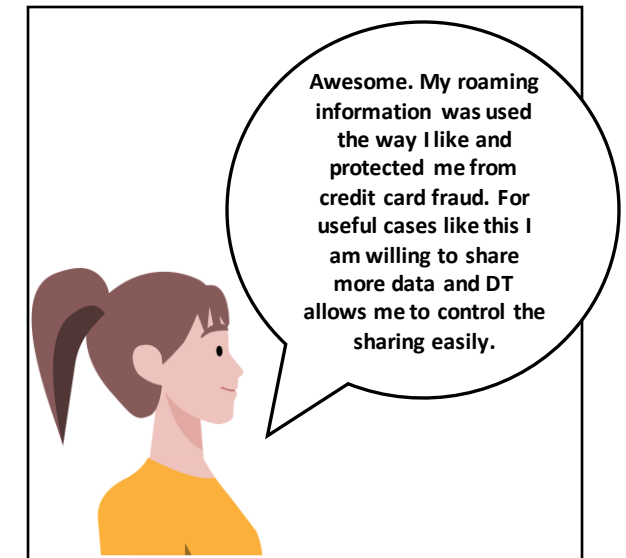
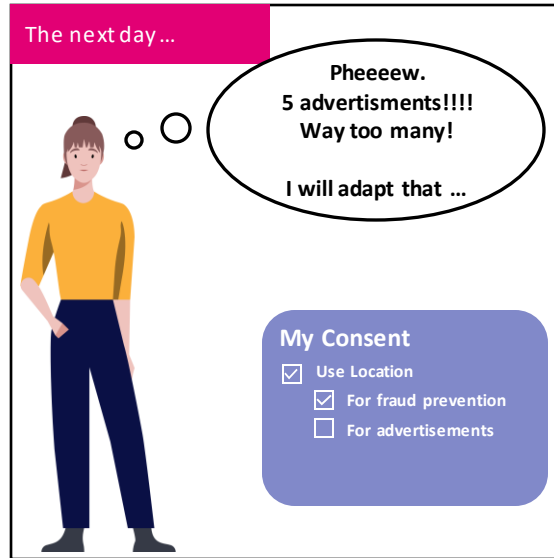
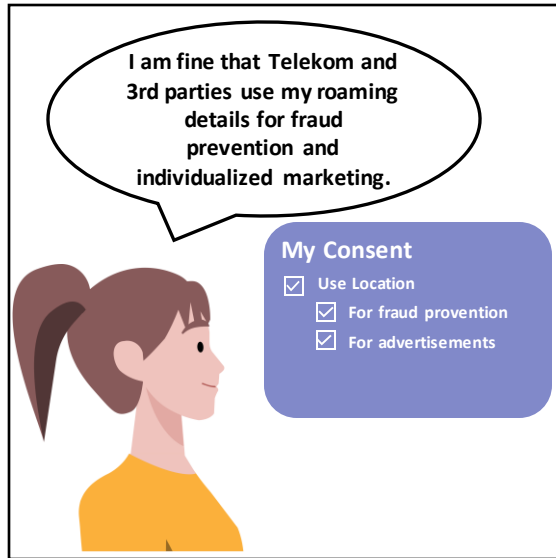
— Confidential —

UC: DT releases new product version



UC: Extended Consent Management

Consent per company and per data point is possible



AGENDA

- Hyper Consents – What
- Hyper Consents – Why
- Hyper Consents – How

How to ensure data is processed the way a consumer has opted for?

- Consumer view – Control & Transparency
- xCompany view – Same rules applied everywhere & administration
- GDPR department view – Simple enforcement of rules & changes
- Product flexibility view – More options for product, business

HC BENEFITS FOR DT DATA DRIVEN BUSINESS

PRODUCT MANAGER VIEW

- HC simplifies Telekom data usage across use cases, services and data silos
- HC saves cost & time in developing new data driven services
- HC enables responsible 3rd party data integration for more personalized services

- HC simplifies consent and improves UX (e.g. synchronizes consents)
- HC works across customer touchpoints e.g. websites, apps, voice assistants & more
- HC provides transparency and control over consent

CONSUMER VIEW

PRIVACY OFFICER VIEW

- HC standardizes handling and deployment of privacy policies & consent
- HC enables automation of policy usage and provides audit-proof trails
- HC uses a mature W3C industry standard that evolves with Telekom's contribution since years

AGENDA

- Hyper Consents – What
- Hyper Consents – Why
- Hyper Consents – How

HYPER CONSENTs

Hyper Consent (HC) is a suite to use, filter and share **customer data** automatically in realtime, based on fine-granular controlled customer consent, **based on a standardized policy language.**

HYPER CONSENT – ONE PAGER

ENABLING DATA DRIVEN BUSINESS MODELS

WHAT

A ready-to-use GDPR compliant consent & consumer data usage oriented product consisting of

- **consumer modules** for consent management, policy assessment, consent audit logs and transparent data usage tracking
- **legal modules** for creation, assessment, validation, versioning and release of policies
- **tracking modules** that log, a and monitor data used from customer data providing operative systems
- **data sharing gatekeeper module** that restricts and filters customer data from operative systems based on consent
- **a versatile, open and standardized language - HC Language - that can define context-dependent policies, both machine- and human-readable**

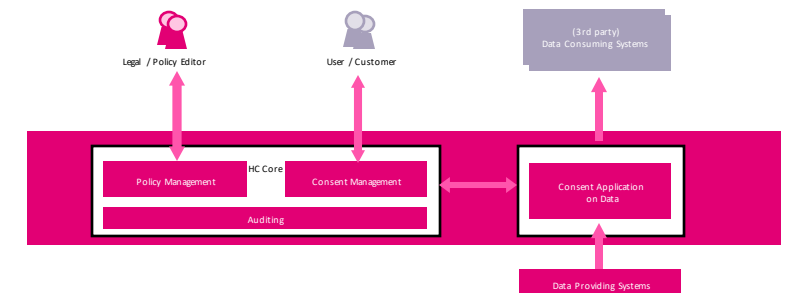
WHY

Support existing and new data driven business model without the need for complex data sourcing and GDPR discussions

HOW

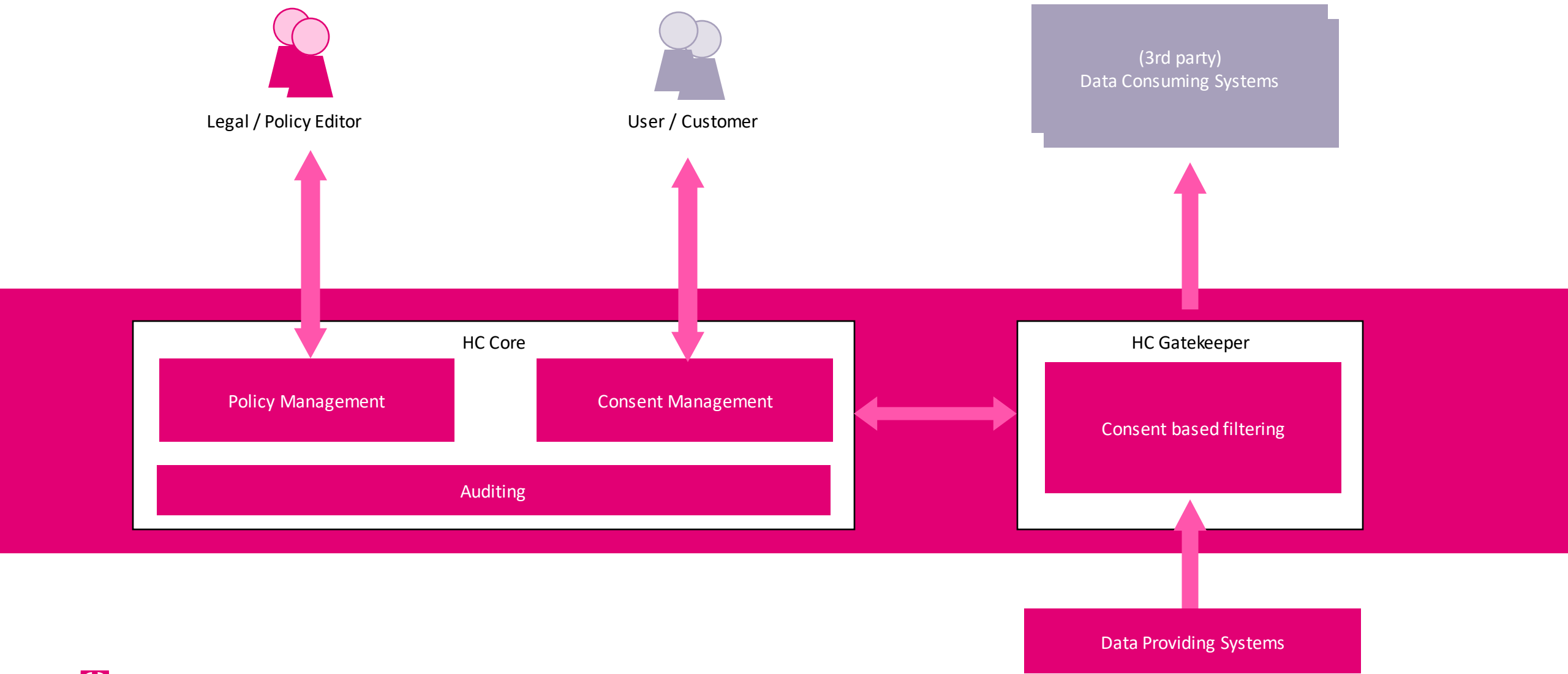
Define standardized approach and central product for sharing data within DT & beyond

- **provide out of box** missing SW elements to enable easy consumption of data based on core a standardized language that follows W3C digital privacy vocabulary standard and is based on EU-wide activities
- **ensure compatibility to include existing CMPs**
- ensure 100% **transparency & control of data any time** via realtime gatekeeper modules and audit logs
- **integration with NatCos** and 3rd parties via M-API



HYPER CONSENT (HC)

SIMPLIFIED OVERVIEW



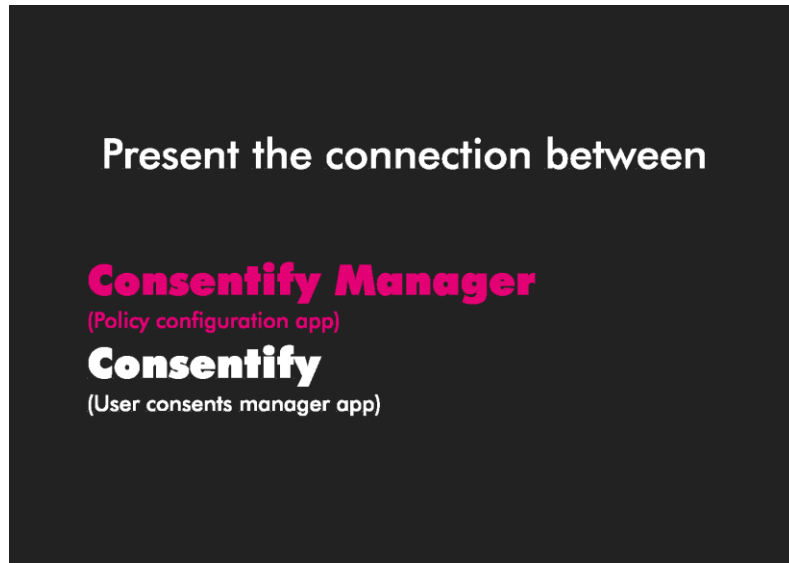
model?

MOCKUP – MOCKUP – MOCKUP – MOCKUP - MOCKUP

What would a front end for policy creators look like?

<https://www.figma.com/proto/XSI4E6BLw1N6SBEikcBqnn/MHC?page-id=0%3A1&node-id=258%3A2136&viewport=2950%2C1300%2C0.1&scaling=scale-down&starting-point-node-id=258%3A2136>

.pdf – click to open



HYPER CONSENT - SUMMARY

Consent in a transparent and user-centric way

Consumer Concerns

- *What do I share exactly?*
- *Who gets my data?*
- *What does the receiver do with my data?*
- *What has been done with my data?*
- *Can I revoke consent?*
- *Is revocation of consent simple and reliable?*



GDPR requirements for valid consents



Simple and transparent at all times

- *Ensure partners can automate DT personal data usage even if there are complex wishes to be considered.*
- *Integration into legacy and new platforms is supported by simple rule set and software modules.*

Impact of Hyper Consent

*We provide an open, standardised product suite for all consumer facing apps, websites, services to **"capture consumers will" and make it machine readable and exchangeable.***

We support OMNI Channel personal data gathering scenarios transparent to the consumer and fully automated for data processing systems



THIS IS THE END - MY ONLY FRIEND THE END



TO BE BUILT: HYPER CONSENT

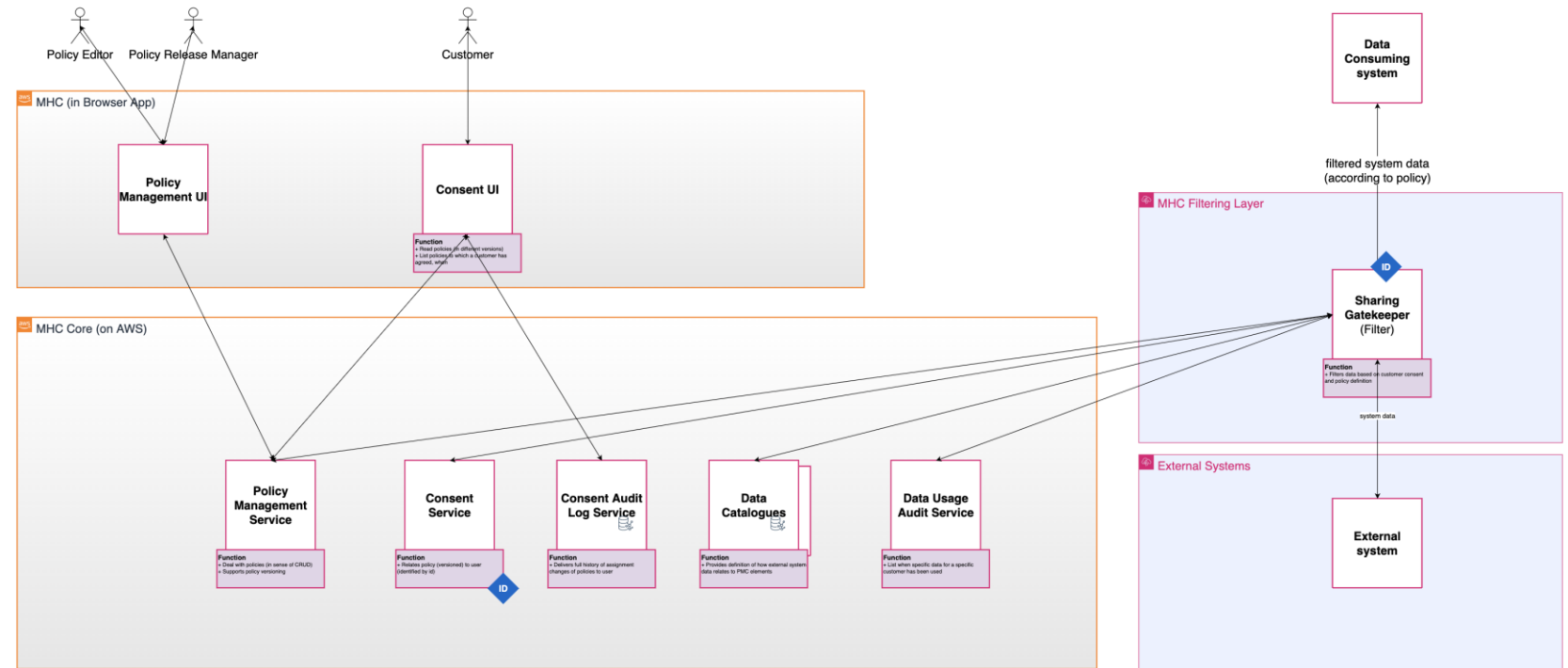
Product Architecture

Modules

- Customer facing UIs (ready-to use or via SDK)
 - Consent Configuration
- Legal
 - Policy Management
- HC Intelligence Backend
 - Policy Management
 - Consent
 - Data Catalogue
 - Audit Logs for policies, consents and data usage
- Distributed** (and decoupled)
 - Sharing Gatekeeper (as SDK)

Exposed APIs

- Data Usage Audit Service (via Sharing Gatekeeper SDK)
- Depending on roles / permission
 - Policy management
 - Consent management
 - Audit logs
 - Data catalogue



Features

- Open and extensible modular product, ready-to-use and with easy integration efforts
- Both, central or per Natco installation possible
- Capabilities based on HC language, an open standard for the definition of context-aware policies
 - TCF (transparency and consent framework) compliant
 - GDPR compliant
- M-API enabled, Magenta Advantage support intended

PRODUCT PROGRAM IMPROVEMENTS EXAMPLES

Today	Tomorrow	Benefit
Each project re-implements KEK / TCF each time.	GDPR as a Plug-In „Lego brick	cheaper, faster, fewer errors when implementing GDPR compliant consumer consents
KEK is statically "wired" in the client / backend, every change requires additional effort	privacy policies can be updated independently of the SW	Faster updates for changes, fewer SW updates -> privacy policies become independent of the release cycle
Limited consent present for data, primarily present in local system in various formats. Difficult to automate data access w.r.t. consent and restrictions.	HC Gatekeeper module supervises data usage according to consumer consent and GDPR.	Consents & data are released automatically according to defined rule sets..
Granular or individual customer policies difficult to map	Very flexible rules can be implemented	Customer requirements, deviations can be flexibly mapped
E2E control with 3rd party for data use is a project effort and use of data from other projects is not trivially feasible.	E2E control is an internal DT service, data use from other DT sources is easily possible.	Data use & distribution is greatly simplified, with simultaneous transparency for all (incl. customers) with regard to use.
Customer queries regarding DT customer data storage, manual effort	Customer can track and see data usage at any time, call centre create delivery of all data with one click	Transparency increases trust and leads to more meaningful data sharing and use. Call centre costs are minimised.
Meta Consents not even thinkable	Meta Consents as a realistic goal (generic consents)	Customer declares preferences regarding data utilization (policy). Opt-Ins for new application areas are easily derived.