

## How to assess digital participation?

The document below shows a detailed description of all the attributes we collected and how we assess and code them. To carry out the coding, we use this evaluation grid. It contains coding rules with concrete criteria for each topic, on the basis of which the research results are evaluated.

### Cluster: Access

The network infrastructure, the market of internet service providers (ISP), internet backbone and quality of bandwidth are some of the indicators that determine how many people can afford and can access the Internet. It is the foundation for people to participate in the digital world. Affordability, access and infrastructure can be determined by government plans to invest in infrastructure, by civil society initiatives to offer public WiFi or alternative networks and by the competitiveness of the ISP market.

#### 1. Affordability

##### **Internet affordability**

How does the price level of network access and data rates for mobile Internet determine the possibilities to access the (mobile) Internet? Do the prices also allow people with low income to access the (mobile) Internet?

##### **Hardware affordability**

How does the price of hardware influence digital participation? What devices can people afford to access the Internet (feature phone, smartphone, PC, laptop etc.)? Does the price allow low-income groups to buy hardware such as smartphones, PCs and laptop and software (smartphones, computers, malware-protection software) for digital participation without being forced to make sacrifices in other areas? Is hardware available in sufficient amounts?

##### **Software affordability**

How does the price of software influence digital participation (e.g. text processing software, editing software, malware-protection)?

##### **Piracy**

Is the pirating of software common practice?

<b>Points</b>	<b>Explanation</b>
0	Prices for data, software and hardware for Internet access and digital participation are exceptionally high compared to average incomes. Only a small group of people is able to access the Internet, leaving the majority of the population without any means to afford hardware, such as computers or smartphones, software or mobile data. There is almost no development that shows that prices are going down.
1	Prices for data, software and hardware for Internet access and digital participation are high compared to average incomes. It is mostly people from high-income groups who are able to access the Internet, leaving many people with little means to either afford hardware such as computers or smartphones, software or mobile data. Slowly, people from low-income groups are starting to be able to afford cheap smartphones and buy data bundles from time to time. Prices are slowly going down.
2	Prices for data, software and hardware for Internet access and digital participation are relatively high compared to average incomes. It is mostly people from high and medium-income groups who are able to afford Internet access, leaving many people from low-income groups with limited means to afford computers, smartphones and mobile data. While people from high-income groups can afford a broadband connection (if available), people from low-income groups access the Internet mostly through basic feature phones or cheap smartphones and by buying mobile data from time to time. Price developments clearly are headed in a positive direction.
3	Prices for data, software and hardware are affordable to the majority of people, including many people from low-income groups. People from high-income and middle-income groups can afford to access the Internet from a desktop computer and a broadband connection as well as the mobile Internet, if available. Low-income groups access the Internet mainly via smartphones and mobile data bundles. Price developments are clearly headed in a positive direction.
4	Data, software and hardware are affordable to everyone. Access to the Internet is possible via desktop computers and smartphones either through a broadband connection or mobile data for everyone, including low-income groups.

## **2. Internet Access**

### **Internet Penetration**

What is the percentage of the population which has access to the Internet?

### **Mobile Internet**

What percentage of the population has access to the mobile Internet?

### **Connectivity**

What is the infrastructure quality and the status of network expansion? How well are sparsely populated areas connected and how do regional differences play a role in this?

### **International access**

Is it possible to use services and server outside the country, for example cloud services?

### **App Stores**

Are app stores (IOS or Android) available and usable for people in the country?

### **Payment**

So people have access to digital payment solutions giving them access to digital goods or letting them transfer money.

<b>Points</b>	<b>Explanation</b>
0	The percentage of the population with access to the Internet is very low. The infrastructure is undeveloped and there are no plans for network expansion.
1	The percentage of the population with Internet access is still relatively small, especially in rural areas. Access mainly takes place in urban settings. Infrastructure mainly exists in urban areas, leaving the rural regions without many options for Internet access. Network expansion is slowly progressing, although rural areas are not included.
2	The percentage of the population with Internet access is growing, also in rural areas. Infrastructure is relatively good in urban areas, and network expansion to rural areas is slowly progressing. There are plans to further expand the network to rural areas.
3	The percentage of the population with Internet access is relatively high including a growing number of people in rural areas. Infrastructure in urban areas is well-developed, while rural areas still lag behind in certain aspects. Plans for further network expansion in rural areas are in place and are being implemented.
4	The percentage of the population with Internet access is very high. People in urban and rural areas have near equal access the Internet. Infrastructure is well-developed in both urban and rural areas.

### **3. Public Internet**

#### **Internet Cafés**

Are Internet cafés or community centers with Internet access available? How accessible are they in different regions or cities? Is the usage limited by government legislation? Are there plans to further develop public Internet access?

#### **Public Wi-Fi**

Is public Wi-Fi available in parts of cities, towns or villages? Do other public institutions such as universities or libraries offer public Wi-Fi? Are there any plans to further develop the structure of public Wi-Fi?

<b>Points</b>	<b>Explanation</b>
0	There is no existing structure of public Internet access, for example through Internet cafés, community centers or public Wi-Fi. There are no plans by authorities to expand public access possibilities.
1	A structure of public Internet access, for example through Internet cafés, community centers or public Wi-Fi, is available in some places, but not all. There are some plans by authorities to further expand public Internet, but implementation is slow.
2	A structure of public Internet access, for example through Internet cafés, community centers or public Wi-Fi, is available in more and more locations. There are plans to further increase public Wi-Fi infrastructure and these are being implemented.

3	The structure of public Internet access, for example through Internet cafés, community centers or public Wi-Fi, is relatively well-developed. Plans to further increase access possibilities, especially through public Wi-Fi, are being implemented
4	The structure of public Internet access, for example through Internet cafés, community centers or public Wi-Fi, is very high. There is a dense network of Internet cafés, community centers and, lately, public Wi-Fi locations.

#### 4. Infrastructure

##### Backbone

How is the national digital infrastructure connected to the international backbone? Is cross-border communication and media usage limited by technical shortcomings or government measures? Are there any technical outages?

##### Network expansion

Are there any plans by government or private companies to further expand the network?

##### Bandwidth

How can the available bandwidth be described regarding digital participation aspects? How high is the average usable bandwidth and which generation of broadband cellular networks (2G to 5G) is available? Is it possible to use data-intensive applications and services (e.g. video services or cloud-computing)?

##### Quality

How good is the technical quality of the Internet infrastructure? Are there problems with the power supply? Are there network failures?

Points	Explanation
0	Network quality is very poor. National infrastructure is not connected to the international backbone, making cross-border communication difficult. Bandwidth is very low; 3G networks are rarely available. Data-intensive services can almost never be used. There are no plans to expand the network.
1	Network quality is not good. National infrastructure is connected to the international backbone in some areas, but there are still technical problems. Bandwidth is relatively low; the density of 3G services is growing, however. Some people are able to use data-intensive services, but this is limited to people living in urban areas. Early discussions on network expansion have begun.
2	Network quality is developing and more reliable, leading to fewer network disruptions. Bandwidth is growing; 3G services are available everywhere, while 4G services are offered in some areas. People can increasingly use data-intensive services although there are some limitations in rural areas. There are concrete plans on network expansion and some related projects have begun to be implemented.
3	Network quality is relatively good and reliable. Bandwidth is relatively fast with 4G network service available to all the population. Data-intensive services can be used by the majority of the population with only limited restrictions in rural areas. Network expansion activities are being actively pursued.

4	Network quality is very well-developed and reliable. Bandwidth is fast and the majority of people have access to 4G networks. Data-intensive services can be used by the majority of the population without restrictions in rural areas. There are constant initiatives by the government or other stakeholders to increase network expansion.
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## 5. Choice

### Market competition

Does the population have sufficient choice concerning ISP and mobile providers? Are providers forced to operate their servers within the national territory (and are they therefore more vulnerable towards government interventions)? Are there any limitations on new providers who wish to enter the market?

### Zero Rating

Are there any zero-rating services available, such as Facebook's Internet.org? Do zero-rating services influence user's choice of preferred websites and service providers?

### Alternative networks

Are there any alternative networks that can be used (e.g. in crisis situations or by activists) that can be installed and used to circumvent censorship and to maintain communication services?

Points	Explanation
0	People have almost no choice regarding Internet providers due to limited availability. Zero-rating services are available which further limits choice among different providers. Alternative networks are not available.
1	There is limited choice among providers on the national market with certain limitations for new players wishing to enter the market. Zero-rating services are available. Alternative networks are available, but are used by a limited number of people.
2	There are different providers available on the market, but there are still limitations for new providers wishing to access the market. Zero-rating services are available, but have a rather small influence on choice by people. Alternative networks are available but are used by a limited number of people.
3	There is a sufficient number of providers available on the market, and new providers have few barriers to market access. There is a very small number of zero-rating services available that have almost no influence on the market. Alternative networks are available and can be used by many people.
4	The market for ISP and mobile providers is thriving. New players can access the market with ease. Available zero-rating services have no influence on the market. Alternative networks are available and can be used by the majority of the population.

## Cluster: Digital Rights

Digital rights are part of the legal framework which determines if citizens can exert their fundamental human rights to freedom of expression, access to information and their rights to privacy. The importance of digital rights drastically increased in the last years after more and more governments released laws that increase censorship and surveillance and offer governments to shut down the internet in politically sensitive situations. However, citizens fundamentally increased their capability to fight back with active civil society campaign against internet shutdowns and citizens ability to increase their digital security and circumvent censorship.

### 1. Freedom of Speech Laws

#### Constitutional law

Does the constitution include a general right to freedom of expression? Can this right be executed? What are the limits of this right? Does the country ratify international conventions related to freedom of expression?

#### Jurisdiction and international conventions

Are the judicial system and the administration of laws developed in a way that citizen and users' right are protected? Can users and citizens go to court their rights are violated?

#### Media laws

Is there media legislation in place? How does it affect freedom of expression? Are there special laws that regulate social media platforms? If so, what effects do they have?

#### Abuse of the law

Are laws which do not fall into the realm of media and free speech (for example anti-terror legislation or copyright law) misused to constrain freedom of expression?

Points	Explanation
0	The constitution does not include the right to freedom of expression. The rights of citizens and users are not protected by a functioning judicial system. Media laws and regulation have a negative effect on freedom of expression.
1	The right to freedom of expression is generally acknowledged in the constitution. However, in most cases this right is not realized in practice. Media laws and regulation unnecessarily limit freedom of expression.
2	The right to freedom of expression is generally acknowledged in the constitution. While the judiciary has problems, users' rights are often protected. Some laws and regulations protect freedom of expression, but simultaneously, other laws limit freedom of expression.
3	The right to freedom of expression is generally acknowledged in the constitution. The judiciary enforces this right in most cases. In general, media laws and regulations have a positive effect on freedom of expression, while simultaneously there are still laws that have a negative effect on this right. However, efforts to renew these laws are in place.
4	The right to freedom of expression is acknowledged in the constitution and is enforced by a functioning jurisdiction. Media laws and regulations overall protect both freedom of expression and users' rights offline and online.

## 2. Digital Sovereignty

### Internet shutdowns

Do government authorities interfere with Internet communications in potentially threatening ways, for example through Internet shutdowns or by pressuring ISPs to give up user data?

### Privacy

Is there a guarantee to privacy and data security online? Are there any laws that address these issues? Can users communicate freely and in a self-determined manner without fear of government control? Do private companies respect the right to privacy?

### Censorship

Is there any forms of censorship online? What form does it take? Are journalistic and user-generated content blocked or filtered?

### Censorship circumvention

Do media and journalists have the capacity (skills and financial means) to circumvent censorship measures (e.g. through tools such as Psiphon)?

### Safe spaces

Are there any protected communication spaces that can be used by civilians to communicate safely in digital spaces without fear of criminal prosecution, repression or other limitations?

### Whistleblower protection

Is there any legal protections for whistleblowers? Are there ways for informants to safely provide information to journalists?

### Encryption

Do users, especially journalists, use encrypted communication methods or safe communication channels?

### Data security

Do providers such as digital platforms or information portals respect digital security and data protection? Do they offer secure connections through https? Do providers cooperate voluntarily with intelligence agencies or do they actively engage to protect users' rights around data security? Do providers publish transparency reports?

### Internet advocacy

Are there any known digital advocacy groups that run campaigns and advocate for digital rights? Are there any publically known campaigns which have taken place recently? What was their impact?

Points	Explanation
0	Users cannot exercise digital sovereignty. There are interventions and attacks against Internet users by stakeholders in various forms (e.g. Internet shutdowns, abuse of laws or censorship). Privacy and data security are not guaranteed by either authorities or private companies. Users, journalists and activists are not protected from those interventions and do not have the capacities to apply encrypted communications or to use tools to circumvent censorship.

1	Users can not exercise digital sovereignty in most cases. There are some interventions against Internet users by stakeholders in various forms (e.g. Internet shutdowns, abuse of laws or censorship). There are some attempts to improve privacy protection and data security, but they have not been applied. The majority of users, journalists and activists are not protected from those interventions since they do not have the capacity to use encrypted communication methods or censorship circumvention tools.
2	Users can exercise digital sovereignty to certain extent. Occasionally, there are interventions against Internet users by stakeholders in various forms (e.g. Internet shutdowns, abuse of laws or censorship). There are some attempts to better protect privacy and data security and some of them have been applied. Some users, such as journalists and activists, have the capacity to protect themselves against those interventions by applying encrypted communications or using censorship circumvention tools. However, many ordinary users do not have these capacities.
3	Users can frequently exercise digital sovereignty. Interventions in forms of internet shutdowns, abuse of laws or censorship are rare. Privacy regulations and data security measures are in place and most are applied. Users such as journalists and activists have the capacity to protect themselves against interventions by applying encrypted communication methods and using censorship circumvention tools. Ordinary users are already aware about these issues and starting to apply some security measures.
4	Users can exercise digital sovereignty. There are no interventions in the form of internet shutdowns, abuse of laws or censorship. Privacy regulations and data security measures are in place and applied. All users are aware of threats and interventions and are able to protect themselves by applying encrypted communication methods and using censorship circumvention tools.

### **3. Freedom of Information**

#### **Open data**

Are there any projects in the area of open data? How are they being used? Is there an official open data policy?

#### **Open government**

Are there any initiatives in the field of open government? Is the country a member of the open government partnership or other initiatives?

#### **Freedom of information laws**

Are there any freedom of information laws in place and are they effectively implemented? Are information requests free of charge or do fees further constrain the law's application?

#### **Transparency**

How relevant are independent digital citizen portals, transparency or information projects (e.g. from NGOs, civilians or civil society organizations in the areas of government spending, open budget or environmental protection)?

<b>Points</b>	<b>Explanation</b>
0	There is no freedom of information law in place. Citizens have no opportunity to request public information. Open data projects and portals are missing, as well as transparency and information activities by civil society.
1	There is no freedom of information law in place, there are however attempts to work on respective legislation. Citizens have no opportunity to request information, but there is an increasing demand to do so. There are no open data portals in place, however there are early attempts by civil society to address open government and data transparency issues.
2	A freedom of information law is in place, but there are problems of applying these laws in practice. The result is rejections of delays in citizens' requests for information. There are no established open data portals yet, but there are already means to work on them. Civil society initiatives such as open data portals or data transparency projects exist, but usage of those portals is still relatively weak.
3	A freedom of information law is in place and its application is generally successful. In many cases, citizens' requests for information are successful and answered within a given timeframe. Open data portals are established, but are still lacking relevance and timeliness. Civil society initiatives such as open data portals or transparency projects exist and are growing in importance.
4	A freedom of information law is in place and its application is successful. Citizens' requests for information are overwhelmingly successful and answered within a given timeframe. Open data portals are established and are being used by a large number of citizens.

#### **4. Internet Governance**

##### **Internet Governance forums**

Are representatives from different civil society organizations part of the international Internet governance process? Are there any national forums established?

##### **Net Neutrality**

Is there any legislation concerning net neutrality and does it lead to the equal treatment of users, data and services on the Internet?

##### **ISP and digital rights**

Do Internet service providers respect the digital rights of their clients? Are there any possibilities for users to appeal to providers, e.g. to file complaints about data handling? Do they have published guidelines? Are there any known cases where providers handed out information and data about their clients?

<b>Points</b>	<b>Explanation</b>
0	There is no national multi-stakeholder Internet governance process in place. There is also no participation on an international level by either government authorities or civil society groups. ISPs have no awareness concerning the digital rights of their customers. Net neutrality is not respected.

1	There is no national multi-stakeholder Internet governance process in place involving government authorities, private companies and civil society representatives. ISPs are usually unaware of the digital rights of their users. Net neutrality is generally not respected, although there are some critical voices within civil society pressing for more awareness around this issue.
2	A national multi-stakeholder Internet governance process is in place which involves government authorities, private companies and to a growing extent civil society. Representatives are also present on the international level, but are not involved actively. Decisions at this level are acknowledged, but are seldom implemented and sometimes fail to consider the digital rights of citizens. ISPs are sometimes aware of users digital rights, but do not always respect them. There are no net neutrality laws in place, but there is a growing demand for further work on this kind of legislation.
3	There is a national internet governance forum in place which involves government authorities, civil society and private companies. Representatives are also present on the international level, but are not always involved in the decision-making process. Decisions at this level are acknowledged, but not always implemented and do not always consider the digital rights of citizens. Net neutrality laws are in place and are implemented by ISPs most of the time. ISPs are often aware of the digital rights of their citizens and respect them in their decisions.
4	A national internet governance forum takes place involving equal input from government authorities, civil society and private companies. Representatives also actively engage in decisions on the international level. Decisions at these levels are implemented and respect the digital rights of citizens. Net neutrality laws are in place and are adhered to by service providers. ISPs respect the digital rights of users.

## 5. Digital Security

### User digital security

What is the situation concerning digital security for users? Do attacks lead to constraints around digital media use? Do users have the capacity to protect themselves?

### Journalists digital security

What is the situation regarding digital security for the media and journalists? Are they exposed to attacks and how does it affect their work? Does technical censorship exist in form of attacks (e.g. denial-of-service attacks or IP blocking)?

### Cybercrime,

Do people, especially journalists, fall victim to cybercrime attacks?

### Hackers

Do hackers try to intimidate journalists or steal data or passwords?

Points	Explanation
0	There is no awareness or skills for digital security measures either on the part of citizens, journalists or other media representatives. Attacks and other measures such as IP blocking lead to constraints on digital media use in general. It also constrains the work of journalists and media representatives. There are no services or capacity-building initiatives in place offering support leading toward increased digital security for citizens and media workers.
1	There is a growing awareness of the need for digital security measures but almost no skills in the area on the part of citizens, journalists or other media workers. There are attacks and other measures such as IP blocking which effect citizens' activities online and the work of journalists. There are certain services or capacity-building initiatives in place, but the effects and reach of these initiatives is small.
2	Awareness of the need for digital security issues is widely established and some users, such as journalists and activists, already have the skills to protect themselves against attacks and other measures. The number of attacks and other measures is declining. People's communication behavior is not generally influenced, although journalists work is still affected. There are a growing number of initiatives around cyber security in place that have a growing reach, especially regarding the most-affected groups, i.e. journalists and activists.
3	Awareness of the need for digital security issues is widely established. Journalists and increasingly citizens possess the skills to protect themselves against attacks or other measures. There are relatively few attacks and the effect on the majority of users' and journalists' communication is small. There are many initiatives focused on cyber security capacity building in place. They primarily reach vulnerable groups such as journalists or activists but increasingly ordinary citizens as well.
4	Citizens and journalists have awareness of digital security issues and have the capacity to react and protect themselves. Attacks and other measures such as IP blocking are rare and generally do not effect users' communication routines or journalists' work. There are many of options and initiatives focused on capacity building in the field of digital security which have a large effect and reach both vulnerable groups and ordinary users.

## Cluster: Media

The media is the foundation for the supply of information in a society, it is the foundation for social discourse and democratic processes. Only informed citizens can discuss on the basis of knowledge and facts. The variety, quality, timeliness and scope of content and media that can be accessed through the Internet as well as participative formats determine digital participation in a society.

### 1. Digital Media Landscape (Variety and freedom of choice)

#### Media diversity

How can the type and number of digitally usable journalistic media products be described? Are these used by the audience? Is there diversity and freedom of choice? Is the full range of issues important to a society covered?

#### Representation of minorities

Do digital media consider the interests of (linguistic, regional, and socio-cultural) minorities in the population? Does digital media provide regular, up-to-date, and balanced coverage on the topics and concerns related to individual population groups and minorities? Does digital media publish such content in local languages?

#### Social Media diversity

How can the range of digital platforms (especially social media and messaging platforms) be described with regard to digital participation?

Do users have the choice of different platforms? Can they use different channels depending on their information requirements? Are certain providers dominant?

#### Self-Regulation

Are media companies and journalists committed to maintaining ethical standards? Do the standards apply to digital media? Are they well documented? Are there any self-regulation organizations, such as press councils, that users can turn to?

Points	Explanation
0	The landscape in the field of digital media is weak. There are hardly any relevant digital media outlets, diversity—including linguistic—and freedom of choice are thus limited along with the spectrum of topics covered. The interests of minorities are not covered adequately. Social media is dominated by a single provider. Self-regulation does not take place.
1	In the field of digital media, there are only a few outlets, and they cover a limited range of topics. The concerns of minorities are rarely taken into account. Social media is dominated by a single provider. Self-regulation does not take place.
2	The landscape of digital media is beginning to evolve; diversity and freedom of choice are increasing. Users have access to a range of different outlets which provide information, in some cases also in regional languages. The concerns of minorities are partially covered. There is some limited choice concerning social media. Media houses and journalists discuss ethical standards. Self-regulatory bodies (e.g. press councils) which act as a contact point for user complaints are in development.

3	The digital media landscape is strong, offering great diversity and freedom of choice. Users have access to a wide range of digital media outlets and can get comprehensive information there, often in regional languages. The interests of minorities are also covered; some groups have their own outlets. Social media users have a choice of several platforms. Media houses and journalists have committed themselves to ethical standards and comply with them. Self-regulatory bodies (e.g. press councils) serve as a contact point for user complaints.
4	The digital media landscape is strong, offering great diversity and freedom of choice. Users meet a wide range of digital media outlets and can get comprehensive information there, often in regional languages. The interests of minorities are also covered, with groups often having their own outlets. In social media there is also a choice of several platforms. Media houses and journalists have committed themselves to ethical standards and comply with them. Self-regulatory bodies (e.g. press councils) work as a contact point for user complaints.

## 2. Digital Content

### Quality

How can the quality of digital media outlets be described on the basis of journalistic standards (accuracy, timeliness, variety and balance of topics and opinions, variety of presentation, news value, style of presentation, variety of forms of presentation?)

### Dialogue

Do digital media outlets provide users with a feedback channel and are they engaged in discussion with the users? Do you ensure quality of dialogue on the channels provided? Do users also realize these possibilities?

### Inclusion

Do digital media outlets consider the interests of linguistic, regional and socio-cultural minorities within the population? Do they provide regular, up-to-date, and balanced coverage of topics of interest to different population groups and minorities? Do they publish content also in the relevant languages? Is there content that can be used by people who cannot read and write, such as audio or video content in regional languages?

### Wikipedia

Is there a Wikipedia section in the national language? What is the quality and scope of the section's content? Is there an active Wikipedia community which creates its own content?

Points	Explanation
0	The quality of digital media outlets, measured by journalistic standards, is usually poor. Accuracy, neutrality, timeliness, and balance are not guaranteed. A dialogue with users does not take place. The concerns of minorities are rarely addressed.
1	The quality of digital media outlets, measured by journalistic standards, is often poor. Accuracy, neutrality, timeliness, and balance are not guaranteed in many cases. Dialogue with the users rarely takes place. However, individual products stand out in terms of quality. In terms of content, the concerns of minorities are rarely addressed.

2	The quality of digital media outlets, measured by accepted journalistic standards, shows signs of positive development. Often, accuracy, neutrality, timeliness, and balance are not yet fully adopted, but there are efforts to increase quality. Dialogue with users is being sought out and beginning to develop. In terms of content, the concerns of minorities are partially addressed. Even products that are usable for people who cannot read and write, such as audio or video content in regional languages, are starting to evolve. A Wikipedia section in the national language exists.
3	The quality of digital media outlets, measured by accepted journalistic standards, is at a good level. Accuracy, neutrality, timeliness, and balance are ensured in most cases, and exceptions are rare. A dialogue with users is maintained and usually welcomed by the audience. The concerns of minorities are regularly discussed. Products suitable for people who can not read and write, such as audio or video content in regional languages, are partially present. A Wikipedia community maintains a Wikipedia section in the local language.
4	The quality of digital media outlets, measured by accepted journalistic standards, is at a very high level. Accuracy, neutrality, timeliness, and balance are ensured in the vast majority of cases. There is frequent dialogue with users. Very often, the concerns of minorities are addressed. Products suitable for people who can not read and write, such as audio or video content in regional languages, are available. A Wikipedia community maintains a Wikipedia section in the local language.

### 3. Digital Journalism

#### Civic Media, Citizen Journalism

Are citizen journalism projects available? Are there networks in this realm? Do they contribute to informing the population?

#### Blogs

Is there a scene of independent information providers, freelance writers and journalistic bloggers/videobloggers? Do activists and NGOs release editorial products that improve the provision of information to the population?

#### Working Conditions

What are the working conditions of journalists in the field of online journalism (no matter what the legal situation is)? Is the pay sufficient?

Are online journalists free to pursue their activities or are they prevented from doing so? Will there be attacks or arrests? If yes, in which amount?

Do journalists have the skills and equipment to gather material that is usable for digital media?

#### Independence

Are media outlets and journalists independent in their reporting? Do they follow specific (their own) interests? Are they paid for their reporting work?

#### Investigative Journalism

Do online journalists work in the field of investigative reporting?

Points	Explanation
0	Digital citizen journalism projects do not exist. A journalistic blogger scene does not exist. The working conditions of online journalists are precarious, training and equipment are bad, so quality is often poor. Often reporting and topic selection depend on payments (purchased reporting or articles). Investigative journalism is very rare. The investigative journalists who do exist often find themselves under attack.
1	Digital citizen journalism projects exist only very sporadically. A journalistic blogger scene hardly exists. Working conditions of online journalists are usually precarious, training and equipment are in dire need of improvement, so quality is often poor. Reporting and topic selection often depend on payments (purchased reports and articles). Investigative journalism is very rare. The few investigative journalists sometimes find themselves under attack.
2	Digital citizen journalism projects are beginning to develop positively and contribute to providing information to the population. A basic journalistic blogger scene exists, and some blogger have enjoy good reputations. Working conditions of online journalists remain difficult, training and equipment are in need of improvement, but quality is starting to improve. In rare cases, the reporting and topic selection depend on payments (purchased reports and articles). Investigative journalism is beginning to spread. Journalists who work as investigators are rarely exposed to attacks.
3	Digital citizen journalism projects are common and contribute to informing the population. A journalistic blogger scene exists, and some bloggers enjoy good reputations. Working conditions of online journalists remain difficult, but training and equipment are at a sufficient level. In very rare cases, the reporting and topic selection depend on payments (purchased reports and articles). Investigative journalism is beginning to spread. Investigative journalists are very rarely exposed to attacks.
4	Digital citizen journalism projects are common and contribute to informing the population. They make an important contribution to digital participation. An active journalistic blogger scene exists, and several bloggers have achieved nationwide reputations. Working conditions of online journalists are usually good, and training and equipment are usually at a good level. Purchased reports are almost non-existent. Investigative journalism is common, and it carries no threat for journalists.

#### 4. Public-Service Broadcasting

##### Variety of Channels

Are there public-service broadcasters (PSB)? Are they represented with outlets on the Internet and do they reach their target groups there? Do they fulfill their function of providing information? Is their coverage balanced and do they report for different audiences/target groups?

How much public media is used? Is a dialogue taking place?

Are public-service broadcasters sufficiently staffed and financially supported?

## **Independence**

Can the PSB report independently of the government influence or does it represent the views of the state?

## **Relevance**

Does audience members feel the the PSB broadcasts content relevant to their needs? Are all groups in society reached, in different languages?

<b>Points</b>	<b>Explanation</b>
0	Public-service broadcasting (PSB) programming is not present on the Internet or does not fulfill its function there in terms of providing the population with information. Accordingly, the products, if any, are hardly used. The personnel and financial resources are poor; there is no reporting independent of the government. PSB is more or less state broadcasting.
1	Some public-service broadcasting (PBS) programming is present on the Internet but it provides information to the population only to a limited extent. Accordingly, the products are rarely used. The personnel and financial resources are poor; there is usually no reporting independent of the government. PSB is close to a model of state broadcasting.
2	Public-service broadcasting (PBS) seeks to further make its content available on the Internet. The existing content is sufficiently used and fulfills its function in the sense of providing the population with basic information. The personnel and financial resources are in need of improvement. As a rule, independent reporting does takes place.
3	Public-service broadcasting (PBS) offers attractive online services that appeal to different audiences. The existing content has a large audience and fulfills its function in terms of providing the population with information. The personnel and financial resources are good and government-independent reporting is usually carried out.
4	Public-service broadcasting (PBS) offers very attractive online services and is one of the leading media in this area. Different target groups are addressed and brought into dialogue with content that appeals to a variety of people. The existing product fully fulfills its function in terms of providing the population with information. The staff and financial equipment is very good. Reporting is done without government interference.

## **5. Media Viability and Ownership**

### **Media viability and sustainability**

Are media companies able to work on an economically sound basis? Can they operate with economic and financial independence? Are they able to report freely? Do they have a long-term, sustainable business model for the future?

Are they dependent on international funding or government orders?

### **Media market**

How high is the level of concentration in the media sector? Are small media companies able to survive economically, stay independent and grow?

### **Ownership, independence**

Who owns the media? Who controls the media? Are there any shareholders (parties, politicians, government, business interests) which could negatively affect the independence of reporting and freedom of expression and lead to unilateral or interest-led reporting?

### **Digital adoption and new business models**

Have media companies adapted to the challenges of digitization and developed effective and sustainable business models and products? Are they based on a variety of revenue models?

<b>Points</b>	<b>Explanation</b>
0	Digital media companies operate on an economically precarious basis; they are not economically and financially independent. They do not have a long-term and sustainable model for the future. Economic dependence forces companies to limit reporting. The market has a monopolistic structure and makes it near impossible for small media outlets to survive economically. An adaptation to the digitization of the media landscape has not yet begun.
1	Digital media companies are often operating on a weak economic basis; they usually are not economically and financially independent. They usually do not have a long-term and sustainable model for the future. Economic dependence often forces companies to limit reporting. The market has a monopolistic structure and often makes it impossible for small media outlets to survive economically. An adaptation to the digitization of the media landscape has usually not yet begun.
2	Digital media companies are working to improve their economic base. They are partly economically and financially independent. In some cases, they already have a long-term and sustainable model for the future. Economic dependency on politicians or companies persists in some cases. The market only makes it possible, even in exceptional cases, for small media offers to survive economically. Companies have adjusted to the digitization of the media landscape only occasionally.
3	Digital media companies are predominantly on an economically sound basis. They are generally economically and financially independent. Some of them have a long-term and sustainable model for the future. Economic dependence on politicians or companies exist only in some cases. In some cases, the market also enables small media companies to survive economically. Providers have mostly adjusted to the digitization of the media landscape and are in part successfully represented on the market with digital products.
4	Digital media companies can operate on a sound financial foundation. They are completely independent both financially and financially. They have a long-term and sustainable model for the future. There is no economic dependence on politicians or companies. The market also allows small media companies to survive economically. Companies have fully adjusted to the digitization of the media landscape and are successfully represented on the market with digital products.

## Cluster: Society

Socio-cultural factors and education determine how individuals, groups and societies can participate in the digital sphere. Cultural norms, cultural imperatives and laws may influence digital participation in positive and in negative ways. For example, sometimes in many households men are the ones who own and use technologies while women are excluded from these developments. As well, the general educational level and in particular the level of ICT skills influences if a society is capable of utilizing ICTs for its development.

### 1. Social Norms

#### Social Conventions

What role do social norms or stereotypes play in terms of digital participation? Do they have a restrictive or encouraging effect?

Are certain groups or individuals completely or partially excluded from using digital media?

#### Discrimination

Are individuals or groups of people favored or discriminated against in the use of digital information services based on certain characteristics or affiliation?

Does this discrimination mean that certain people or groups can no longer participate?

#### Privacy

Is the value of privacy recognized and appreciated? Does privacy play a role in Internet usage?

#### Trust in media

What is the role of the media in a society? Do citizens trust the media and journalists in comparison to other professions?

Is there a difference between traditional and digital journalism?

Points	Explanation
0	Social norms or stereotypes exclude persons or groups of the population from digital participation. Discrimination on the Internet is very common. Privacy is ignored; its value is not appreciated. Trust in the media does not exist; journalists have a bad reputation compared to other professions.
1	Social norms or stereotypes exclude some persons or groups of the population from digital participation. Discrimination on the Internet occurs regularly. Data protection is relatively unknown, its value largely unappreciated. Trust in the media exists only in exceptional cases; journalists often have a bad reputation compared to other professions.
2	Social norms or stereotypes are beginning to change. However, they still exclude some people or groups from digital participation. Discrimination on the Internet still occurs. Privacy is partially respected; its value is usually appreciated. Trust in the media is beginning to develop positively; the reputation of journalists compared to other professions is improving.
3	Social norms or stereotyped attitudes that exclude certain groups of people or groups from digital participation are losing influence. Discrimination on the Internet is rare. Privacy is usually respected, its value usually appreciated. Trust in the role of the media and the reputation of journalists compared to other professions is at a good level.

4	Social norms or stereotyped attitudes have a positive influence on digital participation. Society actively works to ensure that all persons and groups of the population can participate. Discrimination on the Internet is very rare. Privacy is respected, its value appreciated. Trust in the role of the media and the reputation compared to other professions of journalists is high.
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## 2. Discussion Culture

### Hate Speech, Fake News

How can the discussion culture be described on the Net, especially on social media platforms?

Is the quality of the debate in the network fair?

Is there an exchange based on topics and solutions? Is it fundamentally possible to have constructive online debates? Or do phenomena like fake news, personal attacks and hate speech dominate the conversation?

### Self-Censorship, Chilling Effects

Do users refrain from participating in the online communication because they fear negative consequences due to hate speech, surveillance or laws? Do users omit or suppress certain kinds of statements which can be described as self-censorship?

### Algorithms and control

How do platform operators control and manage the content on their platforms? Is it possible to see by what standards content is blocked or deleted? Is freedom of expression possible? Do users whose content has been banned have opportunities to appeal? Do victims of hate speech and discrimination have opportunities to appeal? Do providers of platforms cooperate with authorities and possibly grant access to user data? Are there any initiatives and means to increase the quality of information and culture of discussion (e.g. verification initiatives)?

Points	Explanation
0	The discussion culture on the Net, especially on social media platforms, is very negative. An exchange based on topics and solutions does not take place. Debates are destructive and characterized by phenomena such as fake news, personal attacks and hate speech. People avoid online forums and are not involved in discussions on social or political issues. There are no initiatives and measures to increase the quality of information and the culture of discussion.
1	The discussion culture on the Net, especially on social media platforms, is negative with a few exceptions. An exchange based on topics and solutions usually does not take place. Debates are often destructive and are characterized by phenomena such as fake news, personal attacks and hate speech. Often, people avoid online forums and avoid participating in discussions on social or political issues. There are no initiatives and measures to increase the quality of information and the culture of discussion.

2	The discussion culture on the Net, especially on social media platforms, is beginning to move in a positive direction. Initiatives and measures aimed at increasing the quality of information and discussion culture have been launched. An exchange based on topics and solutions begins to develop. Debates are rarely purely destructive. However, phenomena such as fake news, personal attacks and hate speech are still common. People sometimes avoid online communication and are only occasionally involved in discussions on social or political issues.
3	The discussion culture on the Net, especially on social media platforms, is at a good level, which means people generally have the opportunity to engage with topics and concerns without restrictions. Initiatives and measures aimed at improving the quality of information and the culture of discussion are active and can provide solutions in the event of problems. Exchanges take place in most instances based on topics and are solution oriented. Debates are rarely destructive. Phenomena like fake news, personal attacks and hate speech are still present. In some instances, there, people avoid discussions on social media and other online forums.
4	The discussion culture on the Net, especially on social media platforms, is consistently positive with a few exceptions. People have the opportunity to get involved with topics and concerns relevant to them. This possibility also exists for minorities. Initiatives and measures aimed at improving the quality of information and culture of discussion are active and can provide solutions in the event of problems. Exchanges that take place are usually topic and solution oriented. Debates are rarely destructive. Phenomena like fake news, personal attacks and hate speech are rarely seen.

### 3. Education

#### Literacy

How high is the literacy rate in a country and what are the consequences for digital participation?

Are there, for example, information services that can also be used by people with weak or non-existent literacy (e.g. audio-visual content)?

#### Media and Information Literacy (MIL)

How high is the level of knowledge regarding the use of digital media (MIL level)? Are there any research or data? For example, are users familiar with digital security concepts?

Are they able to evaluate information about sources and decide about the truth/validity of content. Are there differences in individual population groups/regions?

#### MIL-education

Are educational offers in the field of digital media and information literacy (MIL) available at schools, universities and other education institutions or through public initiatives and educational institutions on the Internet?

How well are they accepted and taken advantage of? Is MIL part of curricula? Are there initiatives started by activists? Are digital learning opportunities available to the public?

Points	Explanation
0	The literacy rate is very low and people are very often excluded from digital participation as there is no access to texts and alternative content in audio-visual form is not available. The level of knowledge in the field of media and information literacy is also very low. People do not know the possibilities for digital participation and cannot use it for themselves. Products that can fill these gaps do not exist.
1	The literacy rate is low, and people are often excluded from digital participation because there is no access to texts and alternative content in audio-visual form is very rare. The level of knowledge in the field of media and information literacy is still low. People do not know the possibilities for digital participation or can use it only to a very limited extent. Products that can fill in these gaps are virtually non-existent.
2	The literacy rate is at a medium level, but it is developing positively. Digital participation is therefore open to a part of the population and they can express themselves in text form on the Internet. Alternative content in audiovisual form is restricted. The level of knowledge in the area of media and information literacy is at an average level; people cannot fully exploit the opportunities for digital participation. Products that can fill these gaps exist only sporadically.
3	The literacy rate is high. Digital participation is therefore open to a large part of the population who can express themselves in text form on the Internet. Alternative content in audiovisual form is available. The level of knowledge in the area of media and information literacy is also at a high level, so that people can make extensive use of the opportunities for digital participation. Offers to close the gaps in literacy /media and information literacy exist in many places.
4	The literacy rate is very high. Digital participation is therefore open to the overwhelming majority of the population who can express themselves in text form on the Internet. Alternative content in audio-visual form is sufficiently available. The level of knowledge in the area of media and information literacy is also very high, so that people can fully exploit the opportunities for digital participation. Offers to close the gaps in literacy /media and information literacy exist in many places and are easily accessible.

#### **4. Internet Culture**

##### **Benefit, motivation**

Is the population aware of the options of digital media and motivated to use them? Does it recognize an added value in the use of participatory products and participation in both societal and personal discourse? Or is the use of digital media predominantly in the category of consumption and entertainment?

##### **Net community**

Is there an engaged "Internet community" which is committed to the topics of online journalism and network politics and also engaged in designing its online platforms for engagement (e.g. blogs, topic portals, newsgroups)?

##### **Diversity of interest**

How to describe the use of digital platforms? Are various products used or only one or a few? Is the value of this diversity appreciated?

Are blogs, forums and podcasts being used or do only a few information providers or social media platforms dominate? Is Facebook considered "the Internet"?

**Trust**

Which information conveyors and message services are trusted? Is content considered trustworthy just because it is posted on the Internet?

Who or which providers are trusted to transmit information? Does the media enjoy this trust?

**Collaboration**

Do crowdsourcing projects and collaborative platforms exist that allow users to digitally participate in media (e.g. by supporting research or funding of alternative media outlets by small amounts)? Are they used?

**Engagement, sharing**

Is there a willingness to engage in digital (social media) platforms, such as online petitions, submissions, citizen portals and voting. What examples are there?

**Content creation**

Is there a willingness to actively participate in the creation of content, such as creating contributions for Wikipedia?

Points	Explanation
0	Members of the population are uninformed about the options concerning digital media and/or not motivated to use them because people recognize no added value for themselves. A "network community", committed to the topics of participation and network policy does not exist. When digital platforms are used, they are almost exclusively entertainment oriented. Trust in the media and journalists does not exist. Crowdsourcing projects and/or collaborative platforms that allow for digital participation in the media do not exist or are not used. Social engagement on digital platforms is low as is interest in creating digital content (e.g. for Wikipedia) and making it available to the public.
1	Members of the population are poorly informed about digital media options and/or scarcely motivated to use them since people recognizes little added value for themselves. A "network community", committed to the topics of participation and network policy, hardly exists. When digital platforms are used, it is almost always entertainment oriented. Trust in the media and journalists is very weak. Crowdsourcing projects and/or collaborative platforms that allow for digital participation in the media exist only in individual cases, or are hardly used. A willingness to engage socially on digital platforms is weak, and the interest in creating digital content (e.g. for Wikipedia) and making it available to the public is low.

2	Members of the population are usually informed about the options of digital media. Motivation to use them is developing positively as the added value is increasingly appreciated. A "network community" committed to the topics of participation and network policy is emerging. Digital platforms are not used exclusively for entertainment. Trust in media and journalists is growing. First crowdsourcing projects and/or collaborative platforms that enable users to digitally participate in the media are being welcomed by users. A willingness around social engagement on digital platforms has begun to develop, as well as the interest in creating digital content (e.g. for Wikipedia) and making it available to the public.
3	Members of the population are fully informed about the options of digital media. Motivation to use them is strong, as a sense of added value is considered high. A "network community" committed to the topics of participation and network policy works actively on its own topics and is recognized by the public. Digital platforms are often used for information purposes and for participation in societal discourse. Trust in media and journalists is high. Crowdsourcing projects and/or collaborative platforms that allow digital media participation are well received by users. Social engagement on digital platforms is high, as well as the interest in creating digital content (e.g. for Wikipedia) and making it available to the public.
4	Members of the population are fully informed about the options around digital media. Motivation to use them is very strong since a sense of added value is very high. A "network community" committed to the topics of participation and network policy works intensively for its own interests and manages to communicate its own topics to the public. Digital platforms are often used for informational purposes and for participation in societal discourse. Trust in media and journalists is very high. Crowdsourcing projects and/or collaborative platforms that enable users to digitally engage in media are well received by users. Social engagement on digital platforms is very high, along with an interest in creating digital content (e.g. for Wikipedia) and making it available to the public.

## 5. Inclusion

### Inclusion, barriers

Are people with disabilities able to make full use of the Internet? Do providers of digital services pay attention to technical and content-related accessibility?

### Laws for better inclusion

Is barrier-free access to government websites mandatory?

Points	Explanation
0	People with disabilities have great difficulty using the Internet. Providers of digital services do not pay attention to technical and content-related accessibility. There is no requirement that content and services from authorities or public agencies be accessible.

1	<p>People with disabilities can only use the Internet to a very limited extent. Providers of digital services usually do not pay attention to technical and content-related accessibility. There is no requirement that content and services from authorities or public agencies be accessible.</p>
2	<p>People with disabilities can only use the Internet to a limited extent. Providers of digital services often do not pay attention to technical and content-related accessibility. There is no requirement that content and services from authorities or public agencies be accessible.</p>
3	<p>People with disabilities can make full use of the Internet. Providers of digital services often pay attention to technical and content-related accessibility. Accessibility of content and services from authorities or public agencies is mandatory, but these rules is only partially respected.</p>
4	<p>People with disabilities can make full use of the Internet. Providers of digital offers usually pay attention to technical and content-related accessibility. Accessibility of content and services from public authorities or authorities is mandatory and these rules are implemented in most cases.</p>

## Cluster: Innovation

The Internet infrastructure itself and their subsequent services are subject to an increasing and fast dynamic development. The ability of organizations, citizens, journalists, media and activists to constantly change the way how we communicate, interact and participate. Progress is indicated by new forms of communication, medial presentation and new business models. Innovation is also often marked by its ability to integrate its user into the creation of content and make them subjects and active participants. Therefore, the ability of citizens to be part of the innovation landscape is part of assessing digital participation.

### 1. Innovation Capacity

#### Strength of innovation

Are traditional media capable of taking advantage of the innovative possibilities offered by digitization, e.g. data journalism, VR, multimedia storytelling?

#### Digital journalism

What is journalists' level of knowledge regarding innovative opportunities offered by digital journalism?

#### Digital projects

Are there any examples of successful projects? Can they reach their audience? Are they sustainable? Can they survive in the market?

Points	Explanation
0	Media houses and journalists are unaware of the innovative opportunities offered by digitization for their own products or their own work. There is also no knowledge about the possibilities offered by digital innovation. Production methods and products of media outlets are exclusively conventional. Media houses have no resources or departments that deal with innovation. There are no examples of successful digital innovation projects.
1	Media houses and journalists are very limited in their use of the innovative possibilities offered by digitization for their own products or their own work. Knowledge about the possibilities offered by digital innovation is only elementary. Production methods and products are predominantly conventional. Media houses have no resources or departments that deal with innovation. There are very few examples of successful digital innovation projects.
2	Media houses and journalists are beginning to discover for themselves the innovative possibilities offered by digitization and, in individual cases, to use them for their products or their own work. Knowledge about the possibilities offered by digital innovation is actively processed. However, production methods and products are digitized in only isolated cases. Media houses already have individual employees who deal with innovation. There are isolated examples of successful digital innovation projects.
3	Media houses and journalists are aware of the innovative possibilities offered by digitization for their own products or their own work. Knowledge about the possibilities offered by digital innovation is available. Production methods and presentation are partly conventional and partly digital. Media houses have resources and their own people involved in innovation. There are regular examples of successful digital innovation projects.

4	Media houses and journalists are well aware of the innovative possibilities offered by digitization, which are ideal for their own products or their own work. Knowledge about the possibilities offered by digital innovation is widespread. Production methods and products are digitized throughout. Media houses have sufficient resources and their own departments dealing with innovation. There are many different examples of successful digital innovation projects. Some media houses/journalists are regarded as trendsetters in the field of digital innovation.
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## 2. Innovative Cluster

### Tech cluster

Are there any innovative clusters (ihubs) or networks? Are there any known individuals who are driving development as change agents?

Are these structures capable of producing their own innovations in the field of media and implementing them in the media landscape?

Or are innovations only in the adaptation of already existing ideas?

Where can these structures be found (only in major cities or also in rural areas)?

### Media startups

Do digital media startups exist? How successful are these? How many are there? Do they have access to capital markets (seed financing, VC, or international investments) or are there other forms of funding (e.g. crowdfunding or foundations)?

Are they known to the public and can they contribute to the improvement of media freedom and free expression?

### Change agents

Are there change agents in the field of journalism and media who are experimenting and moving forward with media innovation? Are these initiatives supported (e.g. crowdfunding)?

### Innovative projects, events

Are there examples of successful projects? Can they achieve reach and/or recognition? Are they sustainable? Can they survive in the market? Are there events at which innovation is promoted and where innovators can meet and collaborate?

Points	Explanation
0	A digital innovation landscape does not exist. There are no innovative clusters, nor are there any individuals who can act as change agents. Digital media startups are rare, as are successful product or project examples. National and international investors do not invest.
1	A digital innovation landscape exists partially but is not yet capable of producing its own innovations. Most of the time, it is about adopting existing ideas. There are virtually no innovation clusters and few people who could act as change agents. Digital media startups are almost non-existent; there are very few successful product or project examples. While there is sporadic investment from national players, international investors are absent.
2	A digital innovation landscape featuring its first distinct innovations is emerging. Innovation clusters or iHubs have begun to emerge, and individuals are taking on a role as change agents. Digital media startups have begun to form along with successful product or project examples. National investors are on the scene although international investors are active only in exceptional cases.

3	The digital innovation landscape is well developed and works mainly on its own innovations. There are innovative clusters or iHubs; individuals are internationally known and considered change agents. Digital media startups have formed as well as successful product or project examples. National investors invest regularly, international investors are starting to discover the opportunities of the market.
4	The digital innovation landscape is very strong. There are numerous innovative clusters or iHubs nationwide; several people are internationally known and regarded as change agents and pioneers in the field of digital media. The country enjoys an international reputation for its innovation scene. There are numerous examples of digital media startups as well as successful product or project examples. National and international investors invest regularly.

### 3. Open Innovation Culture

#### Open Source

What is the importance of open source and open innovation? Is open source technology widely used?

Are digital projects often implemented using OS? Is there a qualified, regional, or national developer community involved in these projects?

Are developments from the country made available to the international community and are they used there (e.g. via GitHub)?

#### Open innovation, co-creation, co-working

Are there projects in the field of open innovation? Are there scientific projects that give civil society the opportunity to participate? Are there co-working spaces?

#### Hacks Hackers

Is there an exchange between media/journalists and ICT innovators?

Points	Explanation
0	There is no use of open source and open Innovation. A national developer community does not exist. Exchanges between media/journalists and the field of ICT does not take place.
1	Use of open source takes place only in single cases. However, a national developer community is not yet existent. An exchange between media/journalists and the field of ICT takes place only in exceptional cases. There are no projects in the field of Open Innovation.
2	Use of open source takes place only in single cases but a national developer community is emerging. First exchanges between media/journalists and the field of ICT are taking place. There are no projects in the field of Open Innovation.
3	A deployment of open source takes place regularly. A relatively weak developer community works mainly on the adaptation of existing solutions for their own areas. Exchanges between media/journalists and the field of ICT take place. First approaches in the field of open innovation are being pursued.

4	A deployment of open source often takes place. A strongly developed developer community repeatedly produces its own innovations in the area of digital media which are also internationally recognized. Exchanges between media/journalists and the field of ICT regularly take place in specially organized forums. Open innovation approaches are regularly followed.
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#### 4. Research Landscape

##### Research

Are there research projects in the field of digital journalism and/or digital media at universities or other research institutions?

##### Teaching

In the field of education and training, especially in the field of journalism, are participants brought in contact with innovative technologies so that they can use them for their own work in the future?

##### Scientific community

Is there a scientific community around the topic of digital media innovation and journalism? How is it structured? How big and internationally networked is it? Does it pursue its own goals? Is it independent from government agencies?

##### Publications, events

Do research articles in international publications contribute to further development? Do researchers and students have a chance to take part in national and international gatherings of the research community?

Points	Explanation
0	Research in the field of digital journalism/digital media is non-existent. There are neither research institutes nor research projects in this field. Curricula do not cover topics related to digital journalism, digital media, and digital participation. Personal exchanges among research institutions do not take place.
1	Research in the field of digital journalism/digital media is rare. There are very few research facilities or research projects in this area. Curricula only marginally cover topics related to digital journalism, digital media, and digital participation. Personal exchanges among research institutions take place only occasionally.
2	Research in the field of digital journalism/digital media is emerging. There are some research facilities or research projects in this area. Curricula increasingly take into account topics related to digital journalism, digital media, and digital participation. Personal exchanges among research institutions take place regularly. Publications and events drive the topic forward.
3	Research in the field of digital journalism/digital media is well developed. There are numerous research facilities or research projects in this area. Curricula regularly cover topics related to digital journalism, digital media, and digital participation. The first specialized courses have been developed. Personal exchanges among research institutions take place regularly, also internationally. Publications and events drive the topic forward.

4	Research in the field of digital journalism/digital media is at the forefront. There are already numerous research institutes or research projects in this area, which attract attention with their results. Curricula increasingly take into account topics related to digital journalism, digital media, and digital participation. There are specialized courses. Personal exchanges among research institutions take place regularly. Researchers enjoy a good reputation. Publications and events (including international ones) drive the topic forward.
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### 5. International networks

Is the innovation scene perceived as relevant abroad? Is it internationally networked? Do information exchanges take place?

#### International organizations

Are international telecommunications organizations/companies active in the country as innovators (e.g. Google Labs, World Wide Web Foundation)?

#### Funding

Is there international funding for innovation projects from international funds or donors?

Points	Explanation
0	The innovation scene is not perceived as relevant abroad and not well connected with other actors. International organizations/companies are not engaged in supporting or funding innovation products or projects.
1	The innovation scene is perceived only weakly abroad and is hardly connected with other actors. Funding and support by international organizations/companies does not take place.
2	The country's innovation scene is perceived from abroad as having potential, and networking with international actors is beginning to develop. Initial funding and support activities on the part of international organizations/companies can be observed.
3	The country's innovation scene is perceived as relevant abroad, and there is strong networking with international players. Examples of funding and support on the part of international organizations/companies are numerous.
4	The country's innovation scene is perceived as a leader abroad, and there is excellent networking with international players. Examples of funding and support on the part of international organizations/companies are numerous.