METHODOLOGY AND ANALYTICAL FRAMEWORK
G20 ANTI-CORRUPTION OPEN DATA PRINCIPLES ASSESSMENT

Transparency International is a global movement with one vision: a world in which government, business, civil society and the daily lives of people are free of corruption. With more than 100 chapters worldwide and an international secretariat in Berlin, we are leading the fight against corruption to turn this vision into reality.

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INTRODUCTION

PREFACE

In 2015 the G20 Anti-Corruption Open Data Principles were developed as a first step towards leveraging open data as a crucial tool to enable a culture of transparency, accountability and information accessibility as part of efforts to prevent corruption. It was agreed to follow a set of principles based on the International Open Data Charter as the foundation for access to, and the release and use of, open government data to strengthen the fight against corruption. As is always the case with international standards, the crucial aspect is to ensure that these G20 Principles do not solely remain lofty words on paper but are translated into national-level policy and practice across the G20 countries, focusing on the public sector.

Finally, the International Open Data Charter is also in the process of developing the first Charter Implementation Guide on Anti-Corruption (as a working draft), to become a point of reference for exploring how open data can be used in anti-corruption detection, prevention, investigation and enforcement.

STUDY OBJECTIVE

The main objective of this study is to determine how well a sample of G20 countries is doing at the national level in translating the commitments contained within each of the six G20 Anti-Corruption Open Data Principles into national policies and practices. This includes the availability of key anti-corruption datasets as open data.

The research has been conducted for a representative selection of countries, consisting of Germany, France, Brazil, South Africa and Indonesia. This subset of the G20 countries was chosen in view of their readiness, global representation and relevant use cases (for example, Germany will host the next G20 presidency, while France is the current Open Government Partnership host).

For each country, the study aims to answer the following main questions.

1. What are the existing open data policies that support the fight against corruption?
2. Do the open data policies align with the G20 Anti-Corruption Open Data Principles?
3. To what extent have the different countries implemented the G20 Anti-Corruption Open Data Principles? What gaps remain?
4. Are there specific sectors already showing initial signs of the impact of open data in reducing corruption?

With the answers to these questions, the goals in producing this study are to:

1. gain an understanding of where different countries stand in terms of implementing, or whether they have already made efforts to implement, the G20 Open Data Principles;
2. highlight how these principles can be implemented for open data to become an effective tool in the fight against corruption; and
3. present some examples and use cases of concrete good practices and policies already in use that have the potential to be effective in using open data to tackle corruption by looking at specific sectors.

In terms of the datasets assessed in this study, they are as follows.

Anti-Corruption Datasets[1]	
Information on entities (individuals or organisations) that can be potentially involved in a corruption scheme.	
Dataset	**Purpose**
D1 – Lobbying registers: containing a list of registered lobbyists, details of who they are lobbying and who they are lobbying on behalf of.	Make data on representatives of companies and/or associations at parliamentary bodies available and accessible to the public.
D2 - Company registers: containing a list of every company legally registered to operate within a jurisdiction. They should include information on when companies were formed and whether they are still active, as well as including details of company directors.	Understand the often complex relationships between holding companies and subsidiaries to enable citizens and governments to track financial flows and influence.
D3 – Beneficial ownership: Containing the natural person(s) who are the beneficial owner(s) of an asset ultimately, including at least companies or land registrations	Expose and prevent the illicit use of corporate vehicles for money-laundering, corruption, bribery, tax fraud, terrorist financing, etc. Provide stakeholders with information on the relationships between powerful actors in the public sphere, such as companies, political decision-makers, legislators, etc.
D4 – Directories of public officials: containing a list of all public officials above a certain level of seniority, along with details of their role.	Prevent abuse (such as money-laundering, corruption and bribery) in major public functions by officials or their family or associates.
Information on the resources that belong to governments or are intended for public purposes and could be involved in a corruption scheme.	
D5 – Government budget: including national government budget at a high level (e.g. spending by sector, department, sub-department, etc.).	Understand how governments plan for expenditure and measure their commitment to transparency.
D6 – Government spending: records of actual (past) national government spending at a detailed transactional level: at the level of monthly government expenditure on specific items (usually this means individual records of spending amounts under $1 million, or even under $100,000).	Give citizens public access to information on how public money is spent.
D7 – Public procurement: details of the contracts issued by the national or federal government, including contract award data and not just requests	Open up the contracting process for public scrutiny, including all the stages from the bid request to the contract award and possible

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[1] The datasets in this list are intentionally being aligned with those existing in the current ACSP data section (work in progress). See that document for more complete definitions.

for bids.	amendments.
D8 – Political financing: containing data on the financial contributions received by a politician or a political party during a period of time.	Give access to the data on the financial contributions received by a politician or a political party during a period of time.

Information on the performance of the anti-corruption system and the channels that could be used, avoided or violated to commit an act of corruption.

D9 –Voting records: containing registers on individual voters in the national legislature (including session, chamber and law category – amendment, new bill, nomination, etc.).	Provide information on the judiciary system and legislative process with registers on individual votes in the national legislature (including session, chamber, law category, etc.).

Information on the destiny of public resources that were potentially extracted as a result of a corruption scheme.

D10 – Land registers: including national level information on land ownership, tenure and location. This will usually be held by a land registration agency and/or national cadaster.	Make data on land and property owners available and accessible to the public.

ANALYTICAL FRAMEWORK

The analytical framework follows directly from the G20 Anti-Corruption Open Data Principles; in other words, the framework is structured around the six main principles.

1. Open by Default
2. Timely and Comprehensive
3. Accessible and Usable
4. Comparable and Interoperable
5. For Improved Governance and Citizen Engagement
6. For Inclusive Development and Innovation

G20 Anti-Corruption Principles

For each principle, the framework would use the specific global commitments or actions[2] specified by the G20 Anti-Corruption Open Data Principles and turn them into a set of relevant questions in order to measure the national anti-corruption policies and practices.[3] There are in total 35 questions in the questionnaire, with 26 general questions and 9 dataset-specific questions, identified with the 'D-' prefix.

For each of the general questions the researchers are expected to provide a brief open response supported by a reasoned argument as justification, as well as details of the sources used to answer that question.

For each of the dataset-specific questions the researchers will need to respond with respect to each of the ten key datasets. The researchers are expected to provide a simple YES/NO answer, with the additional references required for each of the questions as evidence. *A final score will be calculated on the basis of the aggregated values for each of the dataset questions and each of the datasets.*

- Each 'Y' value is equal to 1.
- Each 'N' value is equal to 0.
- The total score for each dataset row will be calculated as the sum of the 'Y' responses for that dataset.

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[2] For each of the G20 Principles a set of future commitments or action items are specified, all of them starting with the clause 'Therefore, we will:..'. These are also being included in our framework for reference.

[3] For an example of how G20 commitments were turned into measurable questions about national-level policies and practice, please see Transparency International's 'Just for Show' country reports and the attached questionnaire, which was used for the assessment.

The total score for each question column will be calculated as the sum of the 'Y' responses for that dataset in proportion to the number of datasets available in total (that is, the total score for the D-Datasets question).

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Sample Table

Dataset	Dataset	Timeliness	Granularity	Formats	Openness	Accessibility	Open standards	Metadata	Document.	Total score
Lobbying registers	Y	Y	Y	Y	Y	N	N	Y	Y	7
Company registers	Y	N	Y	Y	Y	Y	N	Y	Y	7
Beneficial ownership	Y	Y	Y	Y	Y	Y	Y	Y	N	8
Public officials	N	N	N	N	N	N	N	N	N	0
Government budget	N	N	N	N	N	N	N	N	N	0
Government spending	Y	N	Y	Y	Y	Y	N	Y	Y	7
Public procurement	N	N	N	N	N	N	N	N	N	0
Political financing	N	N	N	N	N	N	N	N	N	0
Voting records	Y	Y	N	Y	Y	Y	Y	Y	Y	8
Land registers	Y	Y	Y	Y	Y	Y	Y	Y	N	8

Principle 1: Open by Default

Open data by default goes a step beyond transparency, as it promotes the provision of reusable data from its source, without requiring requests for information and increasing access in equal terms for everyone; while at the same time, assuring the necessary protection to personal data in accordance to laws and regulations already established.

Action 1: 'Promote, where possible, the development of information technology systems, adoption of policies, and best practices to ensure that all government data, is made open by default, while recognizing that there are legitimate reasons why some data cannot be released and providing clear guidelines for when certain data cannot be released.'

1. **Policies**   What policies are in place to make government data open and/or widely available? Do these policies establish a general right to reuse by means of an explicit 'open by default' or equivalent statement?   *(See ODB C2 question for reference.)*
2. **Exceptions**   To what extent are any exceptions to the principle of 'open by default' defined reasonably and not too broadly (e.g. only protection of privacy, confidentiality, intellectual property or national security issues)? To what extent are there clear guidelines and transparent decision-making processes as to how to decide on any potential exception? Are there exceptions that apply specifically to anti-corruption matters limiting their involvement in the national open data agenda?
3. **Practice**   To what extent is there evidence that government agencies adhere to the existing policies in practice? What are the existing examples of adoption?
4. **ICT systems**   To what extent are there adequate ICT systems in place for data management and sharing that ensure that all government data can be made open by default? Are ICT systems able to provide open data formats directly (i.e. machine-readable and open formats that are available online)?

Action 2: 'Work towards the establishment of an anti-corruption culture of openness and prevention with the help of training and awareness programs, tools, guidelines and communication strategies designed to increase data literacy in government, civil society, and private sector, and promote awareness of the benefits of open data.'

5. **Skills**   Are there awareness and training programmes, tools, guidelines and/or communication strategies in place designed to build internal capacity, improve data literacy and make government representatives aware of the benefits of open data in general and their role in the fight against corruption specifically?
6. **Subnational**   Are there any awareness and/or training programmes promoted by the national government with a specific focus on making subnational governments aware and supportive of the national anti-corruption environment?

Action 3: 'Observe domestic laws and internationally recognized standards pertaining to security, privacy, confidentiality, protection of personal data and intellectual property, trade secrets and subject to these legislation and standards, anonymize data prior to its publication, ensuring that sensitive, personally-identifiable data is removed.'

7. **Data protection** Is there a robust legal or regulatory framework for the protection of personal data in the country without impeding the release of aggregated non-personal data?
Strong data protection frameworks usually include some key features such as broad applicability; the right of choice/consent; the right to access and correct; the responsibilities of information holders; and the right to redress.

8. **Right to information**   Is there a functioning right to information (RTI) or freedom of information (FoI) law?   *(See ODB C5 question for reference.)*
Basic requirements to be considered 'effective' are whether information is (1) available to the public for free or at reasonable/minimal costs in a variety of venues; (2) can be accessed by citizens within a timeframe as defined by the law; and (3) answers the specific request, with explanations for refusal to release information.

9. **Legal framework**   Are there any other policies and/or legal impediments that may have a significant impact on the publication of open data and/or the fight against corruption?

Principle 2: Timely and Comprehensive

*Releasing comprehensive datasets – which are accurate, timely and up to date, published at
a disaggregated level, adequately documented, and following internationally agreed-upon
standards, metadata and classifiers – is crucial to increase data use for anti-corruption. Such
data openness will allow a better understanding of government processes and policy outcomes in as close to real time as possible.*

Action 1: 'Work towards a compendium of good practices and lessons learned on open data that can promote mechanisms for the identification of specific anti-corruption related datasets, standards and tools, and for the development of anti-corruption-related data holdings.'

10. ***D-Datasets***   Are key national anti-corruption-related datasets available online in any form? YES/NO   *(Include links to the available dataset as evidence.)* (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

    If the answer to this question is 'NO' for any of the datasets evaluated then you don't need to continue with the rest of the 'D-' questions for that dataset, given that they won't be applicable.

Action 2: 'Publish high-quality open datasets that are timely, comprehensive, fully described, primary and accurate in accordance with prioritisation that is informed by public requests.'

11. ***D-Timeliness***   Are the available datasets timely and updated? YES/NO
(Include last update date and update frequency as evidence.) (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

Action 3: 'To the extent possible, release data in its original form and at the finest level of granularity available, and that can be linked to any visualisations or analyses based on the data.'

12. ***D-Granularity***   Does the government release datasets at the finest level of granularity available without data aggregations? YES/NO   *(Describe any existing aggregation as evidence.)* (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

Action 4: 'Allow users to provide feedback, and continue to make revisions to ensure the quality of the data is improved as needed.'

13. **Feedback loops** Does the government allow users to provide feedback on the published data?

Action 5: 'Apply consistent information lifecycle management practices, and ensure historical copies of datasets are preserved, archived and kept accessible for a reasonable period of time.'

14. **Data management**   What are the components related to data management, archiving and/or data security for the country or within the legal and policy framework of the anti-corruption initiative?   *(See ODB C3 question for reference.)*

Principle 3: Accessible and Usable

Lowering unnecessary entry barriers, and publishing data on single-window solutions such as central open data portals, increases the value of data, as more citizens and organisations are able to locate and use it to reduce opacity in government institutions.

Action 1: 'To the extent possible, publish open data on central portals, or in ways that can increase its accessibility, so that it can be easily discoverable and accessible for users.'

15. **Catalogue**   Is there any central open data catalogue and/or any database(s) of relevant anti-corruption datasets? Is there any catalogue of anti-corruption cases from the relevant authority?   *(See ODB C1 question for reference.)*
16. **Private sector databases**   Are companies required by law to release anti-corruption, ownership, lobbying and other related data? Does this apply to all sectors or particular sectors (for example, high-risk sectors)?

Action 2: 'Release data in open formats to ensure that it is available to the widest range of users to find, access, understand and use. In many cases, this will include

providing data in multiple, standardised formats, so that it can be processed by computers and used by people.'

17. ***D-Formats*** Does the government release datasets in machine-readable and reusable formats? YES/NO *(Include the list of all available formats as evidence.)* (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

    Some examples of machine-readable and reusable formats are: csv, xls, xslx, ods, xml, shp, px and json. Some examples of formats that, generally speaking, cannot be considered machine-readable and reusable are html, pdf, doc, docx, odf, jpeg and tiff.

Action 3: 'Release open data that is free of charge, under an open and unrestricted licence and without mandatory registration, allowing users to choose to download data without being required to identify themselves.'

18. ***D-Openness*** Does the government release open data that is free of charge and under an open and unrestricted licence? YES/NO *(Include references to any applicable charging policy and licence as evidence.)* (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

    An open licence must clearly state that anyone has permission to reuse it and does not restrict what the data can be reused for, more than attribution and share-alike. Refer to the Open Definition and the [list of conformant licences](#) *for a detailed overview of what counts as an open licence.*

19. ***D-Accessibility*** Does the government release the datasets without mandatory registration? YES/NO *(Include links to any required registration process as evidence.)* (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

Action 4: 'Promote initiatives to raise awareness of open data, data literacy and capacity building for effective use of open data.'

20. **Data literacy** Does the government promote awareness, data literacy and/or capacity-building initiatives within civil society and the private sector for an effective use of open data?

Principle 4: Comparable and Interoperable

Enabling the comparison and traceability of data from numerous anti-corruption-related sectors increases its potential to inform decisions and feedback between decision-makers and citizens.

Action 1: 'Implement, to the extent possible, open standards related to data formats, interoperability, structure and common identifiers when collecting and publishing data.'

21. **D-Open standards**   Does the government implement open standards related to data formats, interoperability, structure and/or common identifiers when collecting and publishing data? YES/NO *(Include references to any implemented standard as evidence.)* (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

    Examples of frequent specialised structure standards include wms, gml, kml, sdmx, ubl, xbrl, cbv, legalML, gtfs, hl7, elm and odcs. Other examples of more generic open formats are csv, xslx, ods, xml and json. Examples of formats that cannot be considered open are pdf, xls, shp and px.

Action 2: 'Ensure that open datasets include consistent core metadata, and are made available in human- and machine-readable formats.'

22. **D-Metadata**   Does the government ensure that the datasets include consistent core metadata including at least a descriptive title, data source, publication date and available formats? YES/NO   *(Include links to any existing metadata descriptions as evidence.)* (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

Action 3: 'Ensure that data is clearly described, that all documentation accompanying data is written in clear, plain language and that data users have sufficient information to understand the source, strengths, weaknesses and analytical limitations of the data.'

23. **D-Documentation**   Does the government provide clear accompanying documentation for the published datasets with sufficient information to understand the source(s) and analytical limitations of the data? YES/NO *(Include links to any accompanying documentation as evidence.)* (Answer this question for each of the ten key datasets list highlighted in green from the *Anti-Corruption Datasets table* in the background section.)

Action 4: 'Engage with domestic and international anti-corruption standards bodies and other standard-setting initiatives to support increased interoperability between existing international standards, to support the creation of common, global data standards where they do not already exist and to ensure that any new data standards we create are, to the greatest extent possible, interoperable with existing standards.'

24. **Data and transparency standards** Is the government committed to the development and/or adoption of any new or existing global data or transparency standards that could contribute to the fight against corruption?

    Some of them are: the [Open Contracting Data Standard](); the [Extractive Industries Transparency Initiative Standard](); the [Construction Sector Transparency Initiative](): the [Global Initiative for Fiscal Transparency](); the [Popolo standard for civic engagement](); and the [Fiscal Data Package]().

Principle 5: For Improved Governance and Citizen Engagement

Open data empowers citizens and enables them to hold government institutions to account. Open data can also help them understand, influence and participate directly in decision-making processes and in the development of public policies in support of public sector integrity. This is paramount to build trust and strengthen collaboration between governments and all sectors of society.

Action 1: 'Promote the use of digital participation platforms to engage with organisations working in the domain of transparency, accountability and anti-corruption to determine what data they need.'

25. **Data needs**   Does the government promote the use of digital participation platforms to engage with organisations working in the domain of transparency, accountability and anti-corruption to determine what data they need?

Action 2: 'Provide tools, success stories and guidelines designed to ensure government officials are capable of using open data effectively.'

26. **Toolkits**   Does the government provide tools, success stories and/or guidelines designed to ensure that government officials are capable of using open data as a means to prevent corruption?

Action 3: 'Implement research, oversight and review processes to report regularly to the public on the progress and impact of open data as a tool to prevent corruption.'

27. **Studies**   Has the government implemented research studies or reviews on the issue of using open data to prevent corruption?   *(Please provide specific government-supported studies or review processes.)*
28. **Reporting**   Has the government reported regularly to the public on how open data is used in the country to prevent corruption?   *(Please provide links to publically available reports or indicators and other relevant government communications.)*

Action 4: 'Establish and improve the mechanisms and procedures around the use and application of open data by citizens and the public sector.'

29. **Interaction**   Are there mechanisms and/or procedures that encourage the interaction, use and application of open data by citizens and the public sector?
30. **Civic engagement**   Do citizens play an active role in strengthening open data use in the fight against corruption? What is the general level of civic engagement and citizens' capabilities for open data?

Principle 6: For Inclusive Development and Innovation

Open data, through reinforced transparency and integrity, can promote greater social and

economic benefits by providing actionable information to build effective, accountable and
responsive institutions; this alone can increase economic output and efficiency in government operations. Furthermore, while preventing corruption, open data also facilitates
the development of new insights, business models and digital innovation strategies at a
global scale.

Action 1: 'Promote the adoption of open-data-related items in other principles and activities supported by the G20´s ACWG where the application of open data can be useful.'

31. **AC agenda**   Does the government promote the adoption of open-data-related items in other principles and activities supported by the G20's ACWG where the application of open data can be useful (such as beneficial ownership transparency, bribery, high-risk sectors or public and private sector transparency and integrity)?

Action 2: 'Encourage citizens, civil society, private sector organisations and multilateral institutions to open up the data created and collected by them in order to move towards a richer open data ecosystem with multiple sources to strengthen transparency and integrity and to prevent corruption.'

32. **Ecosystem**   Does the government encourage citizens, civil society, private sector organisations and multilateral institutions to open up data created and collected by them (in order to move towards a richer open data ecosystem with multiple sources to strengthen transparency and integrity)?

Action 3: 'Create or explore potential partnerships with relevant stakeholders working in the anti-corruption sector to support the release of open data and maximise their impact through effective use.'

33. **Partnerships**   Does the government create or explore potential partnerships with relevant stakeholders working in the anti-corruption sector to support the release and use of key open datasets?

Action 4: 'Share technical expertise and experience with other governments and international organisations, and create or support programmes and initiatives that foster the development or co-creation of visualisations, applications, APIs, data mashups and other tools based on open data.'

34. **Networks**   Does the government share its open data anti-corruption technical expertise and experience with other governments and international organisations?
35. **Tools**   Does the government create or support programmes and initiatives that foster the development or co-creation of visualisations, applications, APIs, data mashups and other tools based on open data that could contribute to the fight against corruption?

RESEARCH METHODOLOGY

METHODOLOGY

The research methodology provides robust evidence to answer the questions developed under the analytical framework above. Looking at the G20 Anti-Corruption Open Data Principles, this is likely to be largely *country-specific policies, regulations, initiatives, commitments and projects* that require a **comprehensive desk review**. In addition, **key informant interviews** with relevant experts in government and the country's open data and anti-corruption expert community will be necessary to contrast the desk review information and to assess the 'practice' elements of the principles.

The main purpose of the desk research phase will be to identify the main national government policies, practices and priorities for anti-corruption and open data, drawing upon online sources and published materials.

Although most of the questions are expected to be answered by drawing upon desk research, in a number of cases we may wish to interview or consult with some relevant stakeholders to identify the appropriate answer to a question that cannot be answered on the basis of a desk review solely, or to contrast and complete the information gathered through desk research. Such stakeholders may include:

- government officials working in open data and/or anti-corruption offices or projects;
- open data and/or anti-corruption experts;
- non-governmental organisations, development agencies, multilateral bodies and donors; and
- investigative journalists, researchers and academia.

OTHER REFERENCING SOURCES

- The G20 Anti-Corruption Open Data principles.
- The International Open Data Charter principles and the annotated version of the charter (work in progress).
- International Open Data Charter anti-corruption implementation guidelines.
- The G20 Anti-Corruption Agenda and 2015–16 G20 Anti-Corruption Action Plan.
- The 2016 London Anti-Corruption Summit: Communiqué.
- The United Nations Sustainable Development Goal 16: Promote just, peaceful and inclusive societies.
- Open Data Policy Guidelines.
- Transparency International UK, *How Open Data Can Help Tackle Corruption*, policy paper (London: Transparency International UK, 2015).

- Krzysztof Izdebski, *Transparency and Open Data Principles: Why They Are Important and How They Can Help Increase Public Participation and Tackle Corruption*, working paper (Warsaw: Technology for Transparency in CEE and Eurasia [Transparencee], 2015).
- The EU-funded project 'Towards a European strategy to reduce Corruption by enhancing the use of Open Data' (TACOD), coordinated by the Research Centre on Security and Crime (RISSC) and involving the Transparency International chapters in the United Kingdom and Italy. The project evaluated the use of open data to reduce corruption in four European countries: the United Kingdom, Italy, Spain and Austria.
- Karolis Granicka, *Open Data as a Tool to Fight Corruption*, Topic Report no. 2014/04 (Brussels: European Public Sector Information Platform, 2014). Provides examples of the use of open data to monitor political party financing, parliamentary proceedings, the media, the private sector, the judiciary, the civil service, lobbyists and public procurement.
- Tim Davies and Silvana Fumega, *Mixed Incentives: Adopting ICT Innovations for Transparency, Accountability, and Anti-Corruption,* U4 Issue no. 2014/4 (Bergen: Chr. Michelsen Institute, Anti-Corruption Resource Centre, 2014).
- UN Department of Economic and Social Affairs, Division for Public Administration and Development Management, Open Government Data for Citizen Engagement in Managing Development Toolkit.
- Professor Matthew Stephenson's comprehensive bibliography on corruption and anti-corruption.
- A list of anti-corruption research resources compiled in 2013.