

Survey response for Mexico

OECD database of governance of public research policy

This document contains detailed responses for Mexico to the survey on governance of public research policy across the OECD. It provides additional background information to the OECD database of governance of public research policy as described in Borowiecki, M. and C. Paunov (2018), "How is research policy across the OECD organised? Insights from a new policy database", *OECD Science, Technology and Industry Policy Papers*, No. 55, OECD Publishing, Paris, <https://doi.org/10.1787/235c9806-en>. The data was compiled by the OECD Working Party on Innovation and Technology Policy (TIP). Data quality was validated by delegates to OECD TIP Working Party the in the period between March 2017 and May 2018. Additional references that were used to fill out the questionnaire are indicated.

The data is made freely available online for download at <https://stip.oecd.org/resgov>.

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Abbreviations and acronyms

CAR	Convenios de Administración por Resultados Result-oriented Agreements
CCTI	Coordinación de Ciencia, Tecnología e Innovación Office of Coordination of Science, Technology and Innovation
CONACYT	Consejo Nacional de Ciencia y Tecnología National Council for Science and Technology
CONAGUA	Comisión Nacional del Agua National Water Commission
CONSEVAL	Consejo Nacional de Evaluación de la Política de Desarrollo Social National Council for the Evaluation of Social Development Policy
EU	European Union
FCCyT	Foro Consultivo Científico y Tecnológico The Advisory Forum for Science and Technology
GDP	Gross domestic product
GERD	Gross expenditure on research and development
HEIs	Higher Education Institutions
PECIT	Programa Especial de Ciencia, Tecnología e Innovación The Special Programme for Science, Technology and Innovation 2014_2018
PND	Plan Nacional de Desarrollo 2013-2018 National Development Plan 2013-18
PRIs	Public Research Institutes
RIS-3	Research Innovation Strategies for Smart Specialisation
SEP	Secretaría de Educación Pública Secretariat of Education (Department, Ministry)
SNI	Sistema Nacional de Investigadores National System of Researchers

Survey of public research policy

Topic 1: Institutions in charge of priority setting, funding and evaluations

Table 1. Questions on institutions in charge of priority setting, funding and evaluations of universities and PRIs

Question	Response
<p>Q.1.1. Who mainly decides on the scientific, sectoral and/or thematic priorities of budget allocations for a) HEIs and b) PRIs?</p> <p>c) Which are the main mechanisms in place to decide on scientific, sectoral and/or thematic priorities of national importance, e.g. digital transition, sustainability? Please describe who is involved and who decides on the priorities (e.g., government, research and innovation councils, sector-specific platforms including industry and science, etc.).</p> <p><i>(This question does not refer to who sets overall science, technology and industry priorities. This is usually done by parliaments and government. The question refers to decisions taken after budgets to different ministries/agencies have been approved. Scientific priorities refer to scientific disciplines, e.g. biotechnology; sectoral priorities refer to industries, e.g. pharmaceuticals; and thematic priorities refer to broader social themes, e.g. digital transition, sustainability, etc.)</i></p> <p>d) From 2005-16, were any significant changes introduced as to how decisions on scientific, sectoral and/or thematic orientation of major programmes are taken (e.g. establishment of agencies that decide on content of programmes)?</p>	<p>a and b) According to the Science and Technology Law, the National Council for Science and Technology (CONACYT) decides on scientific priorities for higher education institutions (HEIs) and public research institutes (PRIs). It is the organization responsible for establishing state policies on science and technology and to tracing the Special Program of Science, Technology and Innovation (PECITI) 2014-2018.</p> <p>c) CONACYT is tasked with developing the Special Programme which is the national Science, Technology and Innovation strategy. The Special Programme defines priority areas for public funding and programmes for R&D. CONACYT's mandate includes the formulation and coordination of STI policies within the government. Federal ministries and agencies with STI agendas must coordinate with CONACYT for the design and implementation of STI policies.</p> <p>According to Science and Technology Law, Article 25: The Secretariats of State and entities of the Federal Public Administration may enter into agreements with the CONACYT, whose purpose is to determine the establishment of CONACYT sector funds that are destined to scientific research, technological development, innovation, national or international registration of intellectual property, the training of specialized human reReferences, scholarships, creation, strengthening of groups or academic bodies or professionals of research, technological development and innovation, scientific, technological and innovation dissemination and of the infrastructure required by the sector in question. Said agreements shall be entered into and the funds shall be constituted and operated in accordance with the bases established in sections I and III of article 24 and sections I, III, IV, V, VI, VII, VIII and IX of article 26 of this Law (Paragraph amended DOF 12-06-2009).</p> <p>The CONACYT coordinates programs such as: S190 National Programme of Quality Graduate Programmes (PNPC), S278 Institutional Found for Regional Development of Science, Technology and Innovations Activities (FORDECYT), F002 Supports Program for STI Activities, S191 National System of Researchers (SNI), S192 Sectoral Strengthening of Scientific, Technological and Innovation Capabilities (FOSEC), U003 Innovation Stimulus Program (PEI), S236 Strengthening of Scientific and Technological Infrastructure and Professorship Program.</p>

Each program is coordinated in a different way. For example, to the The National Program of Quality Graduate Programs (PNPC), whose main objective is to ensure quality in the training of human capital in various areas of knowledge, CONACYT administered in coordination with the Secretariat of Public Education (SEP) (Ministry of Education).

The programs that are approved in the process of academic assessment are integrated into the pattern of the PNPC, are designated based on four levels: 1) International Competition (programs that have partnerships at the international level through agreements that include the mobility of students and teachers, co-supervision of theses and research projects) 2) Consolidation (programs with national recognition of the relevance and impact in the formation of human reReferences in high-level academic productivity, and in collaboration with other sectors of society) 3) In Development (programs with a positive academic exploration based on its improvement plan and feasible goals to achieve in the medium term) 4) By Recent Creation (programs that meet the basic criteria and standards of the frame of reference of the PNPC).

Another example is SNI, a program that aims to promote and strengthen, through the assessment, the quality of the scientific and technological research, as well as the innovation that is generated in the country, operates through an agreement between the HEIs and CONACYT in order that its academic staff may have access to the same stimulus that is offered to the members of the SNI of public institutions.

For the rest of the programs in accordance with the Gross Expenditure on Research and Development (GERD), CONACYT coordinates, form committees of evaluators, publishes call, receives requests for projects aimed at technological innovation in different sectors, and these are evaluated and approved.

d) Missing answer.

References:

EC/OECD STI Policy Survey 2016 for Mexico, Response B4.

Cámara de Diputados del H. Congreso de la Unión (2015), Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, pp.13, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).

Informe de Autoevaluación de CONACYT enero-diciembre 2017 <http://www.sicyt.gob.mx/index.php/transparencia/informes-conacyt/informe-de-autoevaluacion/informe-de-autoevaluacion-2017> (accessed march 2018).

Q.1.2. Who allocates **institutional block funding** to a) HEIs and b) PRIs?

(Institutional block funds (or to general university funds) support institutions and are usually transferred directly from the government budget.)

c) Who allocates **project-based funding** of research and/or innovation for HEIs and PRIs?
(Project-based funding provides support for research and innovation activities on the basis of competitive bids.)

d) Is there a transnational body that provides funding to HEIs and PRIs (e.g. the European Research Council)?

e) What is the importance of such funding relative to national funding support?

f) From 2005-16, were any changes made to way programmes are developed and funding is allocated to HEIs and PRIs (e.g. merger of agencies, devolution of programme management from ministries to agencies)?

a) The Secretariat of Public Education (SEP) (Ministry of Education) allocates block funding to HEIs. Federal public universities are funded by the federal government. Autonomous public state universities receive block funding from the federal government and the state government with the exact shares decided by an agreement with each institution.

b) Sectoral ministries allocate institutional block funding to two thirds of PRIs under their responsibilities, notably the Secretariat of Energy, the Secretariat of Agriculture, Livestock, Rural Development, the Secretariat of Health, and the Secretariat of Environment and Natural ReReferences. CONACYT allocates institutional block funding to PRIs under its responsibility (one third of PRIs).

c) CONACYT operates funds for competitive project funding for HEIs and PRIs. CONACYT runs them either alone or in co-operation with national level sectoral ministries for sectoral funds and with federal government agencies for mixt funds.

CONACYT operates four funds for competitive programmes, a number of sectoral funds in cooperation with sectoral ministries, notably the Secretariat of Energy, the Secretariat of Agriculture, Livestock, Rural Development, the Secretariat of Health, and the Secretariat of Environment and Natural ReReferences, as well as mixt funds in co-operation with federal-level agencies.

d and e) Missing answer

f) No major changes made.

References:

OECD (2009), *OECD Reviews of Innovation Policy: Mexico 2009*, OECD Publishing, Paris, pp. 140, 168.

DOI: <http://dx.doi.org/10.1787/9789264075993-en>

Cámara de Diputados del H. Congreso de la Unión (2015), *Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015*, pp.15-17, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).

CONACYT (n.d.), "Fondos y Apoyos Conacyt", <http://conacyt.gob.mx/index.php/fondos-y-apoyos> (accessed on march 2018).

Q.1.3. Do **performance contracts** determine funding of a) HEIs?

Institutional block funds can be partly or wholly distributed based on performance. (Performance contracts define goals agreed between ministry/agency and HEIs/PRIs and link it to future block funding of HEIs and PRIs.)

b) What is the share of HEI budget subject to performance contract?

c) Do performance contracts include quantitative indicators for monitoring and evaluation?

d) What are the main indicators used in performance contracts? Which, if any, performance aside from research and education is set out in performance contracts?

e) Do HEIs participate in the formulation of main priorities and criteria used in performance contracts?

f) Do the same priorities and criteria set in performance contracts apply to all HEIs?

g) Are any other mechanisms in place to allocate funding to HEIs and PRIs?

h) From 2005-16, were any changes made to funding of HEIs and PRIs?

(In case performance contracts are in place that bind funding of PRIs, please provide information about them.)

a to f) There are no performance contracts between universities and public authorities that determine institutional block funding of HEIs.

g) Performance contracts determine funding of PRIs. PRIs are required to sign Result-oriented Agreements (CAR) to facilitate the evaluation and monitoring of the achievements of their objectives as established in their annual working plans. The evaluation outcomes of the CARs determine the funding of PRIs.

The CARs were introduced by the Science and Technology Law in 2002. The CARs are signed with the CONACYT, the Secretariat of Finance and Public Credit and the Secretariat of the Civil Service. CARs have a five years term and are subject to annual evaluation.

h) No major changes made.

References:

EC/OECD STI Policy Survey 2016 for Mexico, Response C4.

Cámara de Diputados del H. Congreso de la Unión (2015), *Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015*, p.33, http://www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on 23 march 2018).

OECD (2009), *OECD Reviews of Innovation Policy: Mexico 2009*, OECD Publishing, Paris, p. 141. DOI: <http://dx.doi.org/10.1787/9789264075993-en>

Q.1.4. Who decides on the following key **evaluation** criteria of HEIs and PRIs?

a) The Secretariat of Public Education sets criteria to evaluate the performance of HEIs.

Who is responsible for setting criteria to use when evaluating performance of a) HEIs? Who is responsible for b) evaluating and c) monitoring HEIs' performance?

b and c) National Council for Science and Technology (CONACYT) evaluates performance of research actors including HEIs.

Who is responsible for setting criteria to use when evaluating performance of d) PRIs? Who is responsible for e) evaluating and f) monitoring PRIs' performance?

d to f) CONACYT evaluates and monitors the performance of research actors. In the context of the CARs, PRIs' results and impacts are evaluated by either an independent experts or an independent specialised consulting firm using evaluation mechanisms suggested by the CONACYT and the relevant sectoral branch ministries. A financial audit is also conducted.

h) From 2005-16, was any institution created for evaluating HEIs and PRIs or were any changes made to criteria applied for evaluations of HEIs and PRIs?

h) No major changes made.

References:

EC/OECD STI Policy Survey 2016 for Mexico, Responses C4 and B12d.

Cámara de Diputados del H. Congreso de la Unión (2015), *Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015*, p.34, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on 23 march 2018).

CONACYT (n.d.), *Sistema Nacional de Investigadores*, <http://conacyt.gob.mx/index.php/el-conacyt/sistema-nacional-de-investigadores> (accessed on march 2018).

Ley General de Educación, Nueva Ley Publicada en el Diario Oficial de la Federación el 13 de julio de 1993 Texto Vigente última reforma DOF 19-01-2018 https://www.sep.gob.mx/work/models/sep1/Resource/558c2c24-0b12-4676-ad90-8ab78086b184/ley_general_educacion.pdf (accessed on march 2018)

Q.1.5. Which **recent reforms** to institutions that are in charge of priority setting, budget allocations, and evaluations of HEIs and PRIs were particularly important?

There are no recent reforms.

Topic 2: Policy co-ordination mechanisms

Table 2. Questions on research and innovation councils

Question	Response
<p>Q.2.1. a) Is there a Research and Innovation Council, i.e. non-temporary public body that takes decisions concerning HEI and PRI policy, and that has explicit mandates by law or in its statutes to either?</p> <ul style="list-style-type: none"> – provide policy advice (i.e. produce reports); – and/or oversee policy evaluation; – and/or coordinate policy areas relevant to public research (e.g. across ministries and agencies); – and/or set policy priorities (i.e. strategy development, policy guidelines); – and/or joint policy planning (e.g. joint cross-ministry preparation of budgetary allocations)? <p>b) What is the name of the main research and/or innovation Council/Committee? Are there any other research Councils/Committees?</p> <p>c) Are there any other research Councils/Committees?</p> <p><i>References:</i> <i>EC/OECD STI Policy Survey 2016 for Mexico. Response B1, B2, B7.</i> <i>Cámara de Diputados del H. Congreso de la Unión (2015), Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, pp.4-5, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).</i> <i>OECD (2009), OECD Reviews of Innovation Policy: Mexico 2009, OECD Publishing, Paris, p.202.</i> <i>DOI: http://dx.doi.org/10.1787/9789264075993-en.</i> <i>CONACYT Special Program for Science, Technology and Innovation 2014-2018</i> <i>https://www.conacyt.gob.mx/images/conacyt/PECiTI_2014-2018.pdf (accessed on march 2018)</i></p>	<p>a and b) The General Council for Scientific Research, Technological Development and Innovation (General Council) is the main research and innovation council. The Council was created in 2002. It is tasked with decision-making and coordination within government regarding STI policy.</p> <p>c) Other relevant councils include the Office of Coordination of Science, Technology and Innovation (CCTI), and the Advisory Forum for Science and Technology (FCCyT).</p> <p>FCCyT is an independent advisory body for STI policy with representatives from the academia, the private sector and government institutions concerned with STI matters.</p> <p>The CCTI is a technical support unit dependent on the Head of the Presidency of the Republic that seeks to assist in the preparation of diagnoses and reports on the situation of science, technology and innovation in Mexico.</p>
<p>Q.2.2. With reference to Q.2.1, does the Council's mandate explicitly include a) policy coordination; b) preparation of strategic priorities; c) decision-making on budgetary allocations; d) evaluation of policies' implementation (including their enforcement); e) and provision of policy advice?</p>	<p>a to e) The General Council's mandate includes preparation of strategic priorities; policy coordination; decision-making on budgetary allocations; evaluation; and provision of policy advice.</p> <p>The General Council incorporates an Inter-ministerial and Linking Committee, coordinated jointly by a representative from the Secretariat of Finance and Public Credit and the Secretary General of the General Council, with attendance from representative from relevant sectoral ministries. It is tasked with ensuring the coordination of formulation and implementation of STI policy.</p> <p>The General Council developed the Special Programme in which national policy priorities for STI are established. The General Council is also responsible for the monitoring of the implementation of the Special Programme. It also defines strategic guidelines for national public entities implementing or supporting R&D and approves the draft budget for STI which is included in the draft Federal Budget of Expenditure.</p> <p><i>References:</i> <i>Cámara de Diputados del H. Congreso de la Unión (2015), Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, pp.5-6, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).</i></p>

Q.2.3. With reference to Q.2.1, **who formally participates** in the Council? a) Head of State, b) ministers, c) government officials (civil servants and other representatives of ministries, agencies and implementing bodies), d) funding agency representatives, e) local and regional government representatives, f) HEI representatives, g) PRI representatives, h) private sector, i) civil society, and/or j) foreign experts

a to j) The General Council is chaired by the President and includes representatives from various Federal ministries, government agencies, academia and the private sector.

The General Council is chaired by the President of the Republic. The following Ministers take part in the General Council: Foreign Affairs, Finances and Public Credit, Environment and Natural Resources, Energy, Economy, Agriculture, Rural Development and Fisheries, Communication and Transports, Education and Health. The Director General of CONACYT is the Executive Secretary of the General Council. The General Council does not have representatives from Federal states, however, it has one representative from the National Conference of Science and Technology which represents Federal states. The Council has a representative from HEIs (the General Executive Secretary of the National Universities and Higher Education Institutions Association) and one from PRIs (a representative from the Public Research Centres System). It has three representatives from the private sector chosen by the President of the Republic.

The other members of the General Council are the president of the Mexican Academy of Sciences, the General Coordinator of the FFCCyT (cf. Q.2.1.) and two members invited by the President of the Republic upon suggestion of the Executive Secretary. These members participate as independent representatives (i.e. not on behalf of their organisation) and must have sufficient credentials and be part of the science and technology field. Additionally, the President of the Republic may invite personalities from the science and technology field or the private sector to attend the General Council without voting powers.

References:

Cámara de Diputados del H. Congreso de la Unión (2015), Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, pp.4-5, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).

OECD (2009), *OECD Reviews of Innovation Policy: Mexico 2009*, OECD Publishing, Paris, pp.165-166.

DOI: <http://dx.doi.org/10.1787/9789264075993-en>

Q.2.4. With reference to Q.2.1.b., does the Council have its own a) **staff** and/or its own b) **budget**? If so, please indicate the number of staff and the amount of annual budget available.

a and b) The General Council two staff members but they receive no remuneration. The General Council can establish inter-sectoral committees to deal with relevant questions; their work is supported by CONACYT.

c) From 2005-16, were any **reforms** made to the mandate of the Council, its functions, the composition of the Council, the budget and/or the Council's secretariat? Was the Council created during the time period?

c) The General Council's composition was expanded in 2009 to include non-state stakeholders. Previously, it only had state representatives, including the president, nine ministers and four representatives from the FCCyT.

References:

Cámara de Diputados del H. Congreso de la Unión (2015), Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, pp.4-5, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).

Table 3. Questions on national STI strategies

Question	Response
<p>Q.2.5. a) Is there a national non-sectoral STI strategy or plan?</p> <p>b) What is the name of the main national STI strategy or plan?</p> <p>References: <i>EC/OECD STI Policy Survey 2016 for Mexico. Response B1. Conacyt (2014), Programa Especial de Ciencia, Tecnología e Innovación, http://conacyt.gob.mx/images/conacyt/PECiTI_2014-2018.pdf (accessed on march 2018)</i></p>	<p>a and b) The Special Programme for Science, Technology and Innovation 2014-2018 (PECiTI) is the main national STI strategy.</p>
<p>Q.2.6. Does the national STI strategy or plan address any of the following priorities?</p> <p>a) Specific themes and/or societal challenges (e.g. Industry 4.0; "green innovation"; health; environment; demographic change and wellbeing; efficient energy; climate action) - Which of the following themes and/or societal challenges are addressed?</p> <ul style="list-style-type: none"> – Demographic change (i.e. ageing populations, etc.) – Digital economy (e.g. big data, digitalisation, industry 4.0) – Green economy (e.g. natural reReferences, energy, environment, climate change) – Health (e.g. Bioeconomy, life science) – Mobility (e.g. transport, smart integrated transport systems, e-mobility) – Smart cities (e.g. sustainable urban systems urban development) <p>b) Specific scientific disciplines and technologies (e.g. ICT; nanotechnologies; biotechnology) - Which of the following scientific research, technologies and economic fields are addressed?</p> <ul style="list-style-type: none"> – Agriculture and agricultural technologies – Energy and energy technologies (e.g. energy storage, environmental technologies) – Health and life sciences (e.g. biotechnology, medical technologies) – ICT (e.g. artificial intelligence, digital platforms, data privacy) – Nanotechnology and advanced manufacturing (e.g. robotics, autonomous systems) <p>c) Specific regions (e.g. smart specialisation strategies)</p> <p>d) Supranational or transnational objectives set by transnational institutions (for instance related to European Horizon 2020)</p> <p>e) Quantitative targets for monitoring and evaluation (e.g. setting as targets a certain level of R&D spending for public research etc.)</p> <p>f) From 2005-16, was any STI strategy introduced or were any changes made existing STI strategies?</p>	<p>a and b) PECiTI addresses three societal challenges of the PND: Democratizing productivity, modern and accessible government and gender issues.</p> <p>The PECiTI identifies seven priority areas (no order of preference): environment, universe, sustainable development, technological development, energy, health and society; each of which is associated with 35 more detailed priority themes that elaborate on specific technological and economic fields. PECiTI was developed on the basis of the National Development Plan 2013-2018 (PND). The PND set objectives, strategies and priorities for national sustainable development. It aimed to increase the awareness for science, technology and innovation as pillars of sustainable economic and social development; formulate the Special Programme for Science, Technology and Innovation 2014-18 (PECiTI) as the national STI strategy in order to support the transformation of Mexico into a knowledge-based economy; and to raise R&D expenditure to 1% of GDP.</p> <p>c) Mexico has also regional STI strategies in place since 2014: Three Regionals Agendas for Innovation and 32 State Agendas for Innovation at the Federal State levels. These strategies aim to foster decentralisation of STI activities in order to strengthen national STI capacities according to objectives of the PND. The regional and federal entity level strategies were developed using the methodology of the European Union Research Innovation Strategies for Smart Specialisation (RIS-3).</p> <p>d) Missing answer.</p> <p>e) PECiTI includes twelve indicators with quantitative targets for monitoring and evaluation purposes. Quantitative targets:</p> <ul style="list-style-type: none"> – Raise GERD as a percentage of GDP from 0.45% in 2013 to 1% for 2018; 40% of GERD should be spend by the business sector up from 35.8% in 2013; – Increase the share of researchers of the active population from 0.94 per 1000 persons in 2013 to 1.20 in 2018; – Raise number of scientific publications per million inhabitants from 94.4 in 2013 to 115.0 in 2018; <p>Increase share of PhD graduates in science and engineering in total PhD graduates from 53.6% in 2013 to 56.0% in 2018.</p> <p>f) PECiTI was introduced in 2014.</p>

References:

EC/OECD STI Policy Survey 2016 for Mexico. Responses A2 and B1.

Conacyt (n.d.) "Agendas Estatales y Regionales de Innovación", www.agendasinnovacion.mx/ (accessed on 17 February 2017).

Conacyt (2014), "Desarrollo Regional", www.conacyt.gob.mx/index.php/el-conacyt/desarrollo-regional (accessed on 17 February 2017).

Conacyt (2014), *Programa Especial de Ciencia, Tecnología e Innovación*, pp. 48, 53, 76-88, http://conacyt.gob.mx/images/conacyt/PECiTI_2014-2018.pdf (accessed on 17 February 2017).

Q.2.7. What reforms to policy co-ordination regarding STI strategies and plans have had particular impact on public research policy?

In 2013, the coordinating role of CONACYT for policy implementation within government was strengthened by the General Council for Scientific Research, Technological Development and Innovation.

Table 4. Questions on inter-agency programming and role of agencies

Question	Response
<p>Q.2.8. Does inter-agency joint programming contribute to the co-ordination of HEI and PRI policy?</p> <p><i>(Inter-agency joint programming refers to formal arrangements that result in joint action by implementing agencies, such as e.g. sectoral funding programmes or other joint policy instrument initiatives between funding agencies.)</i></p>	<p>Inter-agency joint programming is in place.</p> <p>CONACYT along with some entities of the federal government had created the Sectoral Funds, a program that seeks to allocate reReferences for scientific research and technological development in their particular interest areas. Nowadays, CONACYT has more than 30 sectoral funds with some federal entities such as the Secretariat of Economy, the Secretariat of Energy, the Secretariat of the Interior, the National Water Commission (CONAGUA), and the National Council for the Evaluation of Social Development Policy (CONEVAL).</p>
<p><i>References:</i> EC/OECD STI Policy Survey 2016 for Mexico. Response B6.</p>	
<p>Q.2.9. a) Is co-ordination within the mandate of agencies?</p> <p>b) From 2005-16, were any changes made to the mandates of agencies tasked with regards to inter-agency programming? Were new agencies created with the task to coordinate programming during the time period?</p>	<p>a) CONACYT is the main funding agency in Mexico and its mandate includes coordination of policy implementation within government.</p> <p>b) In 2013, the coordinating role of CONACYT for policy implementation within government was strengthened.</p> <p>The Office of Coordination of Science, Technology and Innovation (CCTI) that was created in April 2013 as part of the Office of the President. It aims to support the President's office and CONACYT in better coordinating the efforts of departments and agencies of the federal government concerned with STI matters.</p> <p>The Inter-ministerial and Linking Committee of the General Council also plays a co-ordination role.</p> <p>Finally, the National Conference of Science and Technology was established in 2002 (by the 2002 S&T Law) to address issues regarding collaboration between the state and federal governments.</p>
<p><i>References:</i> EC/OECD STI Policy Survey 2016 for Mexico. Response B7. OECD (2009), <i>OECD Reviews of Innovation Policy: Mexico 2009</i>, OECD Publishing, Paris, pp.165-166. DOI: http://dx.doi.org/10.1787/9789264075993-en</p>	
<p>Q.2.10. What reforms of the institutional context have had impacts on public research policy?</p>	<p>In 2013, the CONCYT was recognised as the principal body in charge of coordinating Mexico's STI system.</p>
<p><i>References:</i> EC/OECD STI Policy Survey 2016 for Mexico. Response B7.</p>	

Topic 3: Stakeholders consultation and institutional autonomy

Table 5. Questions on stakeholder consultation

Question	Response
<p>Q.3.1. a) Do the following stakeholders participate as formal members in Research and Innovation Councils? (i.e. Formal membership as provided by statutes of Council)</p> <ul style="list-style-type: none"> – Private Sector – Civil society (citizens/ NGOs/ foundations) – HEIs/PRIIs and/or their associations <p>b) Do stakeholders participate as formal members in council/governing boards of HEIs? (i.e. Formal membership as provided by statutes of Council)</p> <ul style="list-style-type: none"> – Private Sector – Civil society (citizens/ NGOs/ foundations) 	<p>a) The Council has a representative from HEIs (the General Executive Secretary of the National Universities and Higher Education Institutions Association) and one from PRIIs (a representative from the Public Research Centres System). It also has three representatives from the private sector selected by the President of the Republic.</p> <p>b) There is no national regulation to include external stakeholder in the governing board of HEIs. For example, the university council of the National Autonomous University of Mexico does not have external members. However, HEIs are encouraged to create Institutional Councils of Linkages to foster collaboration between HEIs, the economy and civil society.</p>
<p><i>References:</i> <i>Cámara de Diputados del H. Congreso de la Unión (2015). Ley de Ciencia y Tecnología. Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, pp.4-5, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).</i> <i>UNAM (n.d.), Consejo Universitario, www.unam.mx/acerca-de-la-unam/organizacion/consejo-universitario (accessed on march 2018).</i></p>	
<p>Q.3.2. a) Are there online consultation platforms in place to request inputs regarding HEI and PRI policy? b) Which aspects do these online platforms address (e.g. e.g. open data, open science)?</p> <p>c) From 2005-16, were any reforms made to widen inclusion of stakeholders and/or to improve consultations, including online platforms?</p>	<p>a and b) An online consultation was held for the design of the PND which does not focus only on STI. Participants responded to questions linked to the broad thematic priority they felt most strongly about out of five, in order to determine sub-priorities. One of these themes (“Mexico with high quality education”) focused on the education and the STI system. Priorities that arose regarding to the STI system was the need for linkages between universities and industries and for increased investments in STI.</p> <p>The online consultation was held between the 28 February and the 26 April 2013 and aimed to capture the main preoccupations of citizens. It gathered answers from 129 299 citizens among which 52% were under 30 years old, 2% where adults over the age of 65 and 52% were women. People also had the opportunity to submit “citizen proposals” in electronic or physical format (33 955 physical suggestions and 3 916 digital ones were received).</p> <p>c) The FFCCyT, an autonomous advisory body for STI policy with representatives from the academia, the private sector and government institutions concerned with STI matters, was created in 2002 and reformed in 2009 in order to promote participation of public and private STI stakeholders in policy formulation and programme design. The FFCCyT was notably involved in the design of the PECiTI (2014) as well as federal and state agencies which support or carry out R&D and innovation activities.</p> <p>In 2002, The General Council’s composition was changed to include non-state stakeholders. Moreover, HEIs are encouraged to create Institutional Councils of Linkages to foster collaboration between HEIs, the economy and civil society. Nine out of ten HEIs had an Institutional Council of Linkages as of 2011 (up from 49% in 2006).</p>

References:

EC/OECD STI Policy Survey 2016 for Mexico. Response H4.

Cámara de Diputados del H. Congreso de la Unión (2015), *Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015*, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on 21 February 2017).

Gobierno de la República (n.d.), "Plan Nacional de desarrollo", p.178, <http://pnd.gob.mx/> (accessed on march 2018).

OECD (2009), *OECD Reviews of Innovation Policy: Mexico 2009*, OECD Publishing, Paris, pp.165-166.

DOI: <http://dx.doi.org/10.1787/9789264075993-en>

Q.3.3. Which reforms to consultation processes have proven particularly important?

The are no reforms made, nonetheless the Online consultation for the National Development Plan 2013-2018 (PND) keeps working as the frame for encourage to create Institutional Councils of Linkages to foster collaboration between HEIs.

References:

Gobierno de la República (n.d.), "Plan Nacional de desarrollo", p.178, <http://pnd.gob.mx/>

Table 6. Questions on autonomy of universities and PRIs

Question	Response
<p>Q.3.4. Who decides about allocations of institutional block funding for teaching, research and innovation activities at a) HEIs and b) PRIs? <i>(National/regional level: If HEIs face national constraints on using block funds, i.e. funds cannot be moved between categories such as teaching, research, infrastructure, operational costs, etc. This option also applies if the ministry pre-allocates budgets for universities to cost items, and HEIs are unable to distribute their funds between these.</i> <i>Institutions themselves: If HEIs are entirely free to use their block grants.)</i></p>	<p>a) Regarding universities, their autonomy differs depending on their status; public Federal universities and some state universities are self-governing while most state universities, and Federal technical universities report directly to the SEP and/or the Federal states' Departments of Education.</p> <p>b) PRIs themselves decide about the allocation of institutional funding to research and innovation activities.</p>
<p><i>Additional References</i></p>	
<p>Cámara de Diputados del H. Congreso de la Unión (2015), <i>Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, p.31, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on 21 February 2017).</i> OECD (2009), <i>OECD Reviews of Innovation Policy: Mexico 2009</i>, OECD Publishing, Paris, p.145. DOI: http://dx.doi.org/10.1787/9789264075993-en;</p>	
<p>Q.3.5. Who decides about recruitment of academic staff at a) HEIs and b) PRIs? <i>(National/regional level: If recruitment needs to be confirmed by an external national/regional authority; if the number of posts is regulated by an external authority; or if candidates require prior accreditation. This option also applies if there are national/regional laws or guidelines regarding the selection procedure or basic qualifications for senior academic staff.</i> <i>Institutions themselves: If HEIs are free to hire academic staff. This option also applies to cases where laws or guidelines require the institutions to publish open positions or the composition of the selection committees which are not a constraint on the hiring decision itself.)</i></p>	<p>a to f) The governing bodies of HEIs and PRIs determine the terms of recruitment and promotion of academic staff. Salaries of academic staff at HEIs and PRIs are decided at the national level as they are civil servants.</p>
<p>Who decides about salaries of academic staff at c) HEIs and d) PRIs? <i>(National/regional level: If salary bands are negotiated with other parties, if national civil servant or public sector status/law applies; or if external authority sets salary bands.</i> <i>Institutions themselves: If HEIs are free to set salaries, except minimum wage.)</i></p>	
<p>Who decides about reassignments and promotions of academic staff at e) HEIs and f) PRIs? <i>(National/regional level: If promotions are only possible in case of an open post at a higher level; if a promotion committee whose composition is regulated by law has to approve the promotion; if there are requirements on minimum years of service in academia; if automatic promotions apply after certain years in office, or if there are promotion quotas.</i> <i>Institutions themselves: If HEIs can promote and reassign staff freely.)</i></p>	

References:

EC/OECD STI Policy Survey 2016 for Mexico, Response B12d.

Cámara de Diputados del H. Congreso de la Unión (2015), Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, pp.32, 34, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on 21 February 2017).

CONACYT (n.d.), Sistema Nacional de Investigadores, <http://conacyt.gob.mx/index.php/el-conacyt/sistema-nacional-de-investigadores> (accessed on march 2018)

OECD (2009), OECD Reviews of Innovation Policy: Mexico 2009, OECD Publishing, Paris, p. 164.

DOI: <http://dx.doi.org/10.1787/9789264075993-en>

Cátedras CONACYT, <https://www.conacyt.gob.mx/index.php/el-conacyt/desarrollo-cientifico/catedrasconacyt> (accessed on march 2018)

Q.3.6. Who decides about the **creation of academic departments** (such as research centres in specific fields) and functional units (e.g. **technology transfer offices**) at a) HEIs and b) PRIs?

(National/regional level: If there are national guidelines or laws on the competencies, names, or governing bodies of internal structures, such as departments or if prior accreditation is required for the opening, closure, restructuring of departments, faculties, technology offices, etc.

Institutions themselves: If HEIs are free to determine internal structures, including the opening, closure, restructuring of departments, faculties, technology offices, etc.)

Who decides about the creation of legal entities (e.g. **spin-offs**) and **industry partnerships** at c) HEIs and d) PRIs?

(National/regional level: If there are restrictions on legal entities, including opening, closure, and restructuring thereof; if restrictions apply on profit and scope of activity of non-profit organisations, for-profit spin-offs, joint R&D, etc.

Institutions themselves: If HEIs are free to create non-profit organisations, for-profit spin-offs, joint R&D, etc.)

References:

Cámara de Diputados del H. Congreso de la Unión (2015), Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, p. 29, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).

Q.3.7. Who earns what **share of revenues** stemming from IP (patents, trademarks, design rights, etc.) created from publicly funded research at a) HEIs and b) PRIs?

- HEI
- Research unit / laboratory within HEI
- Researchers

c) From 2005-16, were any reforms introduced that affected the institutional autonomy of HEIs and PRIs?

a to d) HEIs and PRIs are free to create Technology Transfer Offices (TTOs) as well as for-profit and non-profit legal entities including technology based firms and industry partnerships. Participation of HEIs and PRIs in firms cannot exceed 49%.

a and b) According to the Law on Science and Technology, the HEIs and PRIs establish the conditions of revenues schemes regarding the exploitation of IP themselves. The share accruing to researchers can be up to 70% of royalties.

c) There were reforms of PRIs autonomy in 2005, 2006 and 2009.

Between 2005 and 2009, PRIs were granted greater management autonomy regarding their budget management, contracting with public and private entities and the use of revenues from contracting. Their autonomy regarding human reReferences and spin-offs creation was reduced.

References:

Cámara de Diputados del H. Congreso de la Unión (2015), Ley de Ciencia y Tecnología, Nueva Ley publicada en el Diario Oficial de la Federación el 5 de junio de 2002, texto vigente, Última reforma publicada DOF 08-12-2015, pp. 29, 30, www.diputados.gob.mx/LeyesBiblio/pdf/242_081215.pdf (accessed on march 2018).

OECD (2009), OECD Reviews of Innovation Policy: Mexico 2009, OECD Publishing, Paris, p. 164.

DOI: <http://dx.doi.org/10.1787/9789264075993-en>

Q.3.8. Which **reforms** to institutional autonomy have been important to enhance the impacts of public research?

There are no recent reforms.