Document: SMB12-06b

Endorsed by Audit and Risk Committee of the System Management Board

Incorporates input from ARC and AOC, and results of consultations with Center Audit

Committee Chairs and Center Heads of Internal Audit

Version: 30 November 2018



### Work plan 2019-2021

#### **CGIAR System Internal Audit Function**

**Purpose**: This document presents a 3-year risk-based rolling internal audit plan for CGIAR System for the period 2019-2021. The plan is framed in the context of the CGIAR System 'Risk Families' as agreed in November 2017, and seeks to give reasonable coverage on risk areas where internal audit is the appropriate assurance process taking count of work of other assurance providers (including internal audit processes of the Centers). The Internal Audit Function plan does not duplicate or replace Center/regional internal audit plans.

**Action requested**: CGIAR System Management Board is requested to approve the plan.





- Summary of the proposed CGIAR System Internal Audit Function 2019-2021 work plan
- Introduction
- How the work plan was developed
- Context
- Summing it up
- Identified risk elements mapped to the risk families adopted by the CGIAR System
- Proposed 2019-2021 CGIAR System business plan actions mapped to risk families
- Who are the assurance providers?
- Proposed 2019-2021 CGIAR System Internal Audit Function's work plan & commentary
- Details of 2019 engagements
- Resource allocation for implementation of the CGIAR System internal audit plan



# Summary of the proposed CGIAR System Internal Audit Function 2019-2021 work plan

System risk families	2019	2020	2021 (indicative areas)	
1. CGIAR is no longer a front runner	[mainly covered by other assurance providers based on the assurance mapping however will be under review throughout the planning cycle]			
2. CGIAR loses its central role in AR4D	2019-1 Communication to support brand recognition (ASR)	2020-1 Effective oversight of Genebanks platform (ASR)	Funding strategy framework and managing funder contributions (ASR)	
3. Non-adherence to appropriate values	<ul> <li>2019-2 Ethical research frameworks (ASR)</li> <li>2019-3 CGIAR staff security frameworks (ASR)</li> <li>2019-4 Effective staff grievance practices (ADV)</li> </ul>	<ul> <li>2020-2 Gender mainstreaming in work place review (ADV)</li> <li>2020-3 Non research ethical frameworks (ADV)</li> </ul>	<ul> <li>Activities to support quality of science (ADV)</li> <li>Control environment (ADV)</li> <li>CGIAR crisis management (ASR)</li> <li>Financing modalities and fund allocation (ASR)</li> </ul>	
4. Unsatisfactory evidence and assurance received	2019-5 Assurance activities across the System (ADV)	<ul> <li>2020-4 Common CRP reporting system (ASR)</li> <li>2020-5 Research data management practices in CGIAR (ASR)</li> </ul>	<ul> <li>CGIAR M&amp;E arrangements (ADV)</li> <li>Performance management system implementation (ASR)</li> </ul>	
5. Poor execution	<ul> <li>2019-6 Cloud computing (ASR)</li> <li>2019-7 Review of investment policies &amp; practices (ADV)</li> </ul>	<ul> <li>2020-6 IT security and Business Continuity (ASR)</li> <li>2020-7 CGIAR System Risk Management Framework implementation (ADV)</li> </ul>	<ul> <li>Shared Advisory Secretariat operations (ASR)</li> <li>System policies (ASR)</li> <li>Board effectiveness (ADV)</li> <li>Community of practices (ADV)</li> <li>Study of financial management maturity (ADV)</li> </ul>	
Total	7	7	7 of 12	

www.cgiar.org 3

ASR – Assurance engagements

ADV – Advisory engagements





This document sets out a proposed strategy for the delivery of assurance and advisory services to the System Management Board, its Audit and Risk Committee, System Council and its Assurance Oversight Committee, and management of the System Organization on governance, on risk and control frameworks CGIAR System-wide in the period of 2019-2021\* in accordance with the ToR and the Charter of the CGIAR System Internal Audit Function.

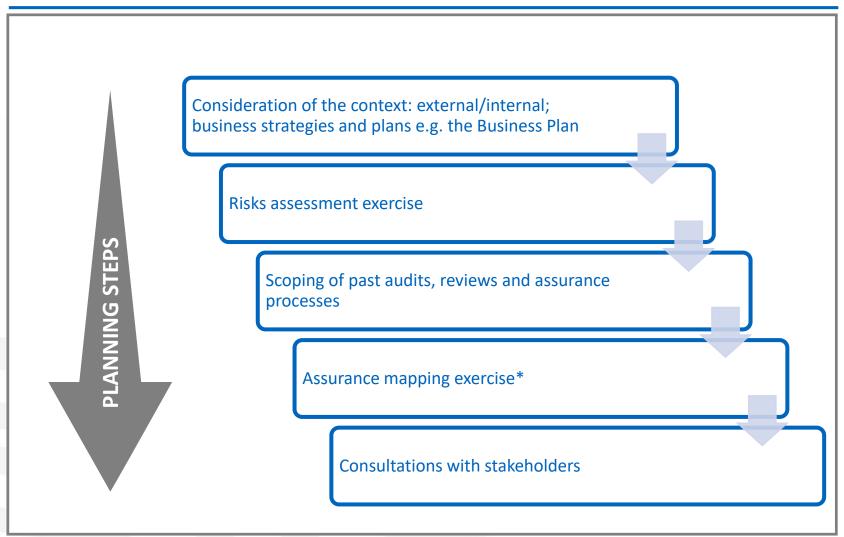
Aiming to provide best possible assurance and advisory services, the audit plan presented herein takes into account the following:

- the System's **Risk Management Framework** approved in 2017 Q4 by the System Management Board and the System Council after extensive collaboration;
- building on the achievements and **learning** during CGIAR System Internal Audit Function's first year in operation;
- striving to avoid duplication with other assurance providers;
- Centers' internal audit needs are met through arrangements funded and organized by Centers themselves with no or limited role of Internal Audit Function. Providing assurance on individual CRP risks and controls is also a responsibility of the Centers;
- Internal Audit Function's strategy approved by the Audit and Risk Committee in April 2018.

<sup>\*</sup> The period reflects the time-frame and content of the CGIAR business plan



### How the work plan was developed



<sup>\*</sup> Details of the assurance mapping are documented in an excel spreadsheet which is provided separately.



# Context: Global hot spots (based on survey of global industry audit professionals)

#### Global organizations such as CGIAR face a number of challenges:

#### Key drivers:

- Growing Attack Sophistication
- Expanding Attack Surface
- Magnification of Poor Data Quality
- Democratization of Data Analysis
- Proliferation of Business Ecosystems
- Nth-Party Risk
- GDPR Enforcement Uncertainty
- Consumer Awareness
- Gender and Racial Bias in the Workplace
- Inattention to Digital Ethics
- Complacency about Macroeconomic Conditions
- Gaps in First and Second Lines of Defense







Data

Governance







#### Key drivers:

- Decentralized Cloud Usage
- Hybrid Cloud Environment



- Competitive Pressures Forcing Organizations to Move Too Quickly
- Rapid Adoption of Robotic Process Automation



- Rapid Evolution of the Digital Economy
- Heightened Expectations of Regulators



- Unclear Impacts of Automation
- Technical Skills Gap
- Acquisition Integration
- Insufficient Cyber Due Diligence
- Increasing Diversity of Company Targets
- Trade and Tariffs
- Supply Chain Complexity
- Decreased Access to Markets



### Context: Internal developments

The CGIAR System Internal Audit Function's work plan was developed in the context of major efforts taking place to bring incremental yet transformational changes within CGIAR System. They include:

- Development, discussion and adoption of the Business plan for the first cycle of 2019-2021;
- Review and overhaul of policy frameworks that guide CGIAR entities including former Financial Guidelines;



- Strengthening of CGIAR System ethical frameworks and discussions around unified Whistleblowing channels;
- Review of advisory services that will somewhat change the assurance landscape with expected increased volume of Center-level impact assessment and evaluation activities. The proposed work plan takes into account the revised structures of the System advisory services and their Terms of References;
- On-going activities to bring Centers closer together through organizational alliances.







- The next slide focuses on more specific risk landscape and lists its elements as they relate to the CGIAR System risk families
- These elements became prominent through the risk assessment exercise conducted as part of the audit planning process
- The slide ten maps actions planned after extensive consultations within CGIAR and with the funders to address these risk elements

### Risk landscape mapped to the risk families adopted by the **CGIAR System**

#### 'CGIAR RISK FAMILIES' – SET AND REVIEWED PERIODICALLY BY SYSTEM COUNCIL

#### 1. CGIAR is no longer a front runner

#### 2. CGIAR loses its central role in AR4D

#### 3. Non-adherence to appropriate values

#### 4. Unsatisfactory evidence and assurance received

#### 5. Poor execution

#### 1.1 CGIAR strategic direction & business model:

- too many strategies that are not coordinated
- lack of clear value proposition and competitive advantage

#### 1.2 Relevance

- Lack of visibility of research results
- Inability to attract strategic
- 1.3 EU court ruling impedes advanced research

#### 1.4 Alignment:

- lack of alignment with consumer expectations
- failure to develop and present credible new CRP portfolio
- Lack of alignment with SDGs or inability to demonstrate it

#### 2.1 Lack of adoption of CGIAR produced science

- 2.2 Lack of CGIAR visibility and brand recognition
- 2.3 Unpredictable funding:
- -SC membership rules limit opportunities to attract new funders
- SC approves unrealistic budget
- FX risks
- Global economic slowdown
- W1/W2 funding is reduced to levels where being part of the System is not viable
- 2.4 Inefficiencies due to lack of Center cooperation in countries of project implementation

#### 2.5 Genebanks

- not maximizing the value of Genebanks
- loss of unique genetic material
- 2.6 Center/CRP divergence

#### Risks assessment

- 3.1 Scientific fraud/poor quality of science - 'Plan-S' EU plans to introduce requirement to publish in open source
- 3.2.1 Ethics:
- GMO related research
- Unethical research practices
- 3.2.2 Lack of trust within the System results in its failure
- 3.2.3 Values and behaviors:
- badly managed harassment incident
- lack of gender diversity

#### 3.3.1 Processes affecting **CGIAR** reputation

- badly managed fraud incident
- Badly managed security incident
- 3.4 Lack of clear/ transparent W1/W2 fund allocation creates lack of trust within the System

4.1 Loss of data, or data integrity is compromised resulting in loss of credibility (Gardian)

- 4.2 Performance management system fails to result in improvements
- 4.3 Inaccurate reports submitted lead to wrong decisions; loss of credibility; integrity of MARLO/MEL is compromised
- 4.4 CRP delivery evidencing:
- Lack of adequate focus and resourcing for M&E
- audit fatigue
  - Partners perceive CGIAR structure to be too complex
  - CGIAR structure is expensive and duplicative
  - 5.5.2 Ineffective
  - governance structure

business plan

5.5.3 Failure to deliver on

- 5.1 Lack of IP support and reporting
- 5.2 Loss of talent

risks

Cyber security

5.3.1 Effective and efficient operations: Risky investments 5.3.2 Joint projects fail as downsides for Centers outweigh System benefits 5.3.3 Advisory services secretariat operations 5.3.4 Risk management 5.3.5 Processes affecting data security & CGIAR reputation - Cloud computing security

- 5.4 Center financial position is compromised:
- Centers undertake risky activities to sustain viability
- Slow adaptation to new financial realities
- Lack of or inappropriate info to understand Center financial position
- poor cash flow management

#### 5.5.1 CGIAR does not add

- to navigate
- Lack of single identity

9



# Proposed 2019-2021 CGIAR System business plan actions mapped to risk families

#### 'CGIAR RISK FAMILIES' – SET AND REVIEWED PERIODICALLY BY SYSTEM COUNCIL

1. CGIAR is no longer a front runner

2. CGIAR loses its central role in AR4D 3. Non-adherence to appropriate values

4. Unsatisfactory evidence and assurance received

5. Poor execution

#### Opportunity and risk indicators in Risk Register to be set by the SMB; reviewed annually for appropriateness

- 1.1 Science relevance/
  cutting edge
  1.2 Competitive
  advantage
  1.3 Alignment with
  priorities of international
  community
  1.4 Compelling research
  agenda
- 2.1 IP is used by scientific and development communities 2.2 CGIAR is good partner 2.3 CGIAR activities are coordinated 2.4 Diversity of funding 2.5 Genebanks' unique role 2.6 Delivery on SRF
- 3.1 Use of ethical research practices 3.2 Values and behaviors support credibility 3.3 Prevention and detection of inappropriate use of funds 3.4 Clarity and transparency of financing
- 4.1 Evidence of impact
  4.2 Appropriate use of
  funds as per work
  programs and budgets
  4.3 Compliance with
  funder's agreements
  4.4 Reliable evidence of
  delivery
  4.5 Effective program
  management
- 5.1 IP support GPG
  5.2 Talent attraction and retention
  5.3 Costs are minimized and assets are safeguarded
  5.4 Centers financially stable
  5.5 Being part of CGIAR is attractive



#### ACTION 1. Implement and enhance the current portfolio of CRPs and Platforms



ACTION 2. Secure sufficient volume and quality of funding



ACTION 5.
Continually improve people management



ACTION 4.
Strengthen
program
performance
management



**ACTION 2.** Secure sufficient volume and quality of funding



### ACTION 3. Prepare and long-term plan



ACTION 6. Pursue new cross-Center alliances



ACTION 8. Align and enhance assurance system



ACTION 5.
Continually improve people management



# ACTION 10. Collaborate on shared resource mobilization and communication



ACTION 7. Enhance collaboration with science and delivery partners



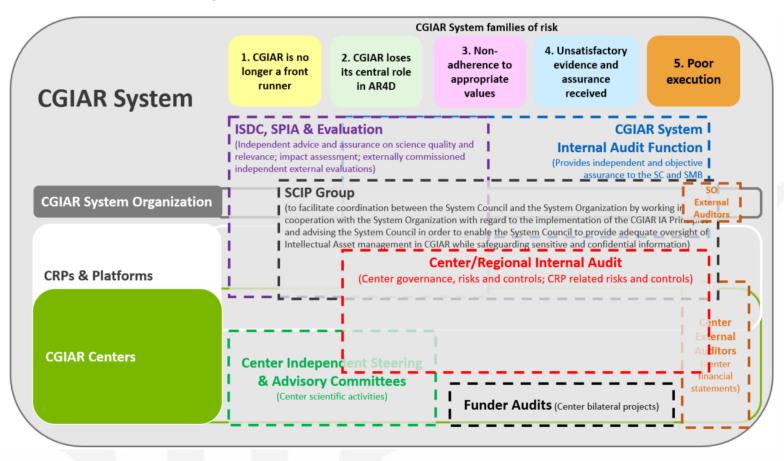
ACTION 9. Align advisory services into System-level decisionmaking

#### **Business plan**



## Who are the assurance providers (3<sup>rd</sup> line of defense)?

Responsibility to provide assurance on management of risks within CGIAR System is shared by a number of functions and arrangements. Below is the high level reflection on the assurance providers and their coverage:





# Proposed 2019-2021 CGIAR System Internal Audit Function's work plan

System risk families	2018	2019	2020	2021 (indicative areas)
1. CGIAR is no longer a front runner	[mainly covered by other assurance prov	ders based on assurance mapping I	nowever will be under review thro	oughout the planning cycle]
2. CGIAR loses its central role in AR4D		<ul> <li>2019-1 Communication to support brand recognition (ASR)</li> </ul>	<ul> <li>2020-1 Effective oversight of Genebanks platform (ASR)</li> </ul>	<ul> <li>Funding strategy framework and managing funder contributions (ASR)</li> </ul>
3. Non-adherence to appropriate values	2018 – New Anti-harassment and whistle-blowing practices (ADV)	<ul> <li>2019-2 Ethical research frameworks (ASR)</li> <li>2019-3 CGIAR staff security frameworks (ASR)</li> <li>2019-4 Effective staff grievance practices (ADV)</li> </ul>	<ul> <li>2020-2 Gender         mainstreaming in work         place review (ADV)</li> <li>2020-3 Non-research ethical         frameworks (ADV)</li> </ul>	<ul> <li>Activities to support quality of science (ADV)</li> <li>Control environment (ADV)</li> <li>CGIAR crisis management (ASR)</li> <li>Financing modalities and fund allocation (ASR)</li> </ul>
4. Unsatisfactory evidence and assurance received	<ul> <li>2018-1 Independence of external auditors (ADV)</li> <li>2018-2 Baseline study of quality of Centers internal audit services (ADV)</li> <li>2018-3 Procurement policy status at CGIAR (ADV)</li> </ul>	2019-5 Assurance activities across the System (ADV)	<ul> <li>2020-4 Common CRP reporting system (ASR)</li> <li>2020-5 Research data management practices in CGIAR (ASR)</li> </ul>	<ul> <li>CGIAR M&amp;E arrangements         (ADV)</li> <li>Performance management         system implementation         (ASR)</li> </ul>
5. Poor execution	<ul> <li><u>2018-4</u> Managing funder contributions and disbursements (ASR)</li> <li><u>2018-5</u> CGIAR System Risk Management self-assessment tool (ASR)</li> <li><u>2018-6</u> Common IT systems (ASR)</li> </ul>	<ul> <li>2019-6 Cloud computing (ASR)</li> <li>2019-7 Review of investment policies &amp; practices (ADV)</li> </ul>	<ul> <li>2020-6 IT security and Business Continuity (ASR)</li> <li>2020-7 CGIAR System Risk Management Framework implementation (ADV)</li> </ul>	<ul> <li>Shared Advisory Secretariat operations (ASR)</li> <li>System policies (ASR)</li> <li>Board effectiveness (ADV)</li> <li>Community of practices (ADV)</li> <li>Study of financial management maturity(ADV)</li> </ul>
Total	7	7	7	7 of 12



# Proposed 2019-2021 CGIAR System Internal Audit Function's work plan commentary

- In 2018 seven engagements were planned and delivered; same level of effort is maintained throughout 2019-2020;
- Following comments from the System Council's Assurance Oversight Committee, the proportion of assurance engagements has increased from 2018 when there were a greater number of advisory engagements;
- For year 2021, the list of potential engagements is longer to recognize possible changes in risk and priorities down the line and to allow flexibility to bring some engagements forward or back;
- Recognizing that Center financial stability is an important concern and building on its
  previous work, CGIAR System Internal Audit Function will be involved in consulting capacity
  in the work on financial indicators led by the Corporate Services Executives working group;
- An area which is not included but flagged as high priority includes country collaboration and inter-Center hosting arrangements. In the past, an engagement proposed to cover this area was not supported. CGIAR System Internal Audit Function proposes to cover this area through a consulting work building on previous activities of the System Management Board's Working Group on Country Collaboration;
- SMB Audit and Risk Committee also flagged an interest in a study of maturity of financial management within CGIAR. This will be discussed at the Center Audit Committee Chairs' meeting and is included as a potential engagement in 2021.



#### System Risk Family: 2. CGIAR loses its central role in AR4D

Engagement	Engagement type	Rationale	Potential objectives and scope
2019-1 Communication to support brand recognition	Assurance	<ul> <li>Strong brand recognition is important to attract funders and partners, and to strengthen the bonds between CGIAR members</li> <li>There are interim CGIAR branding guidelines while each CGIAR entity also supports its own brand therefore potential tensions may arise between the two</li> <li>Addresses the risk 2.2 on page 9</li> </ul>	The engagement will aim to assess to what extent external and internal communication by CGIAR Centers and other entities supports CGIAR brand vis-a-vis its close competitors. The results of this engagement will feed into the 2021 engagement on Funding strategy framework.



#### System Risk Family: 3. Non-adherence to appropriate values

Engagement	Engagement type	Rationale	Potential objectives and scope
2019-2 Ethical research frameworks	Assurance	<ul> <li>Ethical conduct is one of the major concerns within the development sector globally</li> <li>Funders expect and have included in the funding agreement a requirement on ethical conduct</li> <li>Addresses the risk 3.2.1 on page 9</li> </ul>	<ul> <li>The review will include collection of data across the Centers on existing frameworks around research ethics: policies, standards and practices</li> <li>An anonymized summary will be presented to SMB ARC</li> </ul>
2019-3 CGIAR staff security frameworks	Assurance	<ul> <li>CGIAR Centers operate in some challenging, from the security point of view environments</li> <li>Staff and members of governing bodies spend considerable time staying/travelling to/from those locations</li> <li>Some CGIAR entities use IAIRC engaged ISOS as a provider of medical, security and travel assistance</li> <li>If staff/member of a governing body die or get injured as a result of a security incident and CGIAR is found to have inadequate security controls, reputational damage is likely to be high as litigation threats</li> <li>Addresses the risk 3.3.1 on page 9</li> </ul>	<ul> <li>To assess to what extent security risks are addressed by a formal framework/tools at CGIAR and by their application.</li> </ul>
2019-4 Effective staff grievance practices	Advisory	<ul> <li>Organizations set up structured processes and channels to allow staff to raise and address their concerns and/or complaints</li> <li>Adequately resolving staff concerns builds strong organizational culture and reduces the possibility of a concern to become a distraction in the workplace and/or a reputational issue</li> <li>One of the mechanisms to address staff concerns is a grievance policy/process</li> <li>Addresses the risk 3.2.3 on page 9</li> </ul>	<ul> <li>Collect data on Center grievance policies and benchmark them against good practice</li> <li>Report in summarized way and identify good practices that can be shared or implemented and/or identify further activities to understand implementation of grievance policies.</li> </ul>



#### System Risk Family: 4. Unsatisfactory evidence and assurance received

Engagement	Engagement type	Rationale	Potential objectives and scope
2019-5 Assurance activities across the System (Advisory)	Advisory	<ul> <li>There are a number of complaints on the increased levels of Funder audits (on bilateral projects) contributing to higher overall level of scrutiny and 'audit fatigue' across CGIAR</li> <li>Actual levels are poorly understood and negative perceptions proliferate</li> <li>There is a need to understand the assurance activities across the system to build a comprehensive picture of risk coverage and to support combined assurance approach</li> <li>Addresses the risk 4.4 on page 9</li> </ul>	<ul> <li>This activity will increase SMB's understanding of the level of assurance activities across CGIAR based on cross-Center survey</li> <li>It will help further enhance assurance mapping, and</li> <li>Will help to present to the funders not only the existing levels of assurance but also perhaps ways to consolidate some of the assurance activities</li> </ul>



#### **System Risk Family: 5. Poor execution**

Risks	Engagement type	Rationale	Potential objectives and scope
2019- 6 Cloud computing	Assurance	<ul> <li>Cloud computing has been identified as one of the major risks globally</li> <li>CGIAR holds its data/information on CGNET (likely to be moved to Azure), Microsoft cloud and Amazon</li> <li>Certain security risks exist especially if there is a hybrid cloud arrangement</li> <li>Addresses the risk 5.3.5 on page 9</li> </ul>	<ul> <li>To review the existence and adequacy of security arrangements related to cloud computing at CGIAR</li> <li>The engagement will cover shared cloud computing arrangements and will not involve CGIAR Centers</li> </ul>
2019-7 Review of Center investment policies	Advisory	<ul> <li>Concern raised that Centers may apply excessively risky or overly cautious investment practices</li> <li>CGIAR System-wide investment guidance has not been formally adopted</li> <li>Addresses the risk 5.3.1 on page 9</li> </ul>	<ul> <li>Collect Center investment policies and practices, and information on assurance activities over investments</li> <li>An anonymized summary will be presented to SMB ARC</li> </ul>



# Resource allocation for implementation of the CGIAR System internal audit plan

# Assumptions used to develop the audit plan

- 20% of available audit time allocated to unplanned work for example consultancy work;
- 20 days planned for consultancy to cover IT related work;
- 57% is allocated to assurance work (four out of seven planned engagements);
- 20 days is the average audit time.

# Resources planned to be allocated to CGIAR System internal audit plan

- 1.8 FTE is allocated to CGIAR System internal audit work supplemented by a small budget for a consultant engagement for a specialist audit;
- This allows seven planned engagements annually delivered for the CGIAR System in 2019-2021
- An equivalent of two engagements were allocated for any unplanned or consultancy work.



# Resource allocation for implementation of the CGIAR System internal audit plan

### High level indicative 3-year budget of CGIAR System Internal Audit Function \$,000

Year	2019	2020	2021
Total budget	340	291	298

#### **Budgetary Assumptions\*:**

- 1. Number of audits year on year stays the same with planned upskill in capacity in 2019.
- 2. Only one audit a year will be outsourced.
- 3. 2019 budget includes the System portion of costs of the External Quality Assessment (EQA) of Center Internal Audit functions (\$31K), the costs of EQA of CGIAR System Internal Audit Function (\$15K), and the cost of the assurance engagement on Active Directory (\$20K), a carry forward from 2018.
- 4. Travel costs include attendance at ARC and AOC meetings, RIAS (Representatives of Internal Audit Services) and IIA conferences, and a CGIAR Internal Audit Community of Practice meeting.
- 5. Operational costs in 2019 include potential relocation costs for two people.

For training needs, the Gartner (our knowledge provider) resources will be utilized.