BM-Survey – Examples and advise

(These include collection of Finnish, Norwegian and Swiss ’guidelines’. Since original text was in local language, these English text are done with the help of Google translator)

## Background-sheet

| **Question** | **Finnish** | **Norwegian** | **Swiss** |
| --- | --- | --- | --- |
| **University/higher education institute details** |  |  |  |
| Does your institution award doctoral degrees? | pre-filled by IT-secretary |  |  |
| Does institution act on several fields of science? | pre-filled by IT-secretary |  |  |
| University/higher education institute name in original language | pre-filled by IT-secretary |  |  |
| University/higher education institute name in English | pre-filled by BM-project group | | |
| University/higher education institute abbreviation in English | usually pre-filled by BM-project group based on HEI’s domain name | | |
| Web site address of the institution | pre-filled by IT-secretary |  |  |
| Country | pre-filled by BM-project group | | |
| Number of Faculties |  |  | Department or faculties, “top hierarchy level” |
| Number of campuses |  |  |  |
| Number of locations |  |  | Number of all buildings that belong to the HEI |
| Number of buildings |  |  |  |
| Indicators of your organization can be used publicly on EUNIS web site? |  |  |  |
| Finances |  |  | <https://www.bfs.admin.ch/bfs/de/home/statistiken/bildung-wissenschaft/bildungsfinanzen/hochschulen/universitaere.assetdetail.3802754.html> |
| **Currency used in your organization** | pre-filled by BM-project group based on country | | |
| Value added tax (VAT), standard rate as % | pre-filled by BM-project group based on country | | |
| Cost values do include / exclude VAT? | Finnish HEIs without VAT |  |  |
| Total operational costs (including investments) | HEI’s “turnover”. Usually this can be found from HEI’s public web site / financial reports. (excluding depreciation values) |  | *To be clarified* - possible sources are the annual reports or the data from the BFS (T1 expenditure of the universities in 2016 by universities and departments (in francs) |
| Total income from IT services to other organisations | HEI’s income if it is “selling” services to other universities or institutes. E.g. Metropolia applied sciences is selling SIS (=Peppi) for several HEIs. |  | Includes all services provided to external parties as well as third-party funding income from projects and programs. Possible sources are the annual reports or the data from the BFS (T2a Funds available to finance the effort in 2016 by financial sources and universities (in francs) - total third-party funds. |
| Research expenditure | Overall financing of research in HEI. Various sources (government, foundations, companies) |  | *To be clarified* - possible sources are the annual reports or the data from the BFS (coverage of the costs of universities by department, performance, revenue category and university). A specific query can be created here. |
| **Completed degrees and credits** |  |  |
| Completed degrees in total\* | Public gov-source: vipunen.fi-service IT-secretary either collect this or is checking it.  Remark! UAS: Do not include values of”Ammatillinen opettajankoulutus” because its scope is just 60 credits. |  | All degrees should be listed here (including MAS, but without CAS or DAS) |
| Completed credits in total (ECTS)\* | Public gov-source: vipunen.fi-service. Sum of “Tutkinto-opiskelijoiden” + “Muu kuin tutkinto-opiskelijoiden” credit points.  AMK: <https://vipunen.fi/fi-fi/amk/Sivut/Opintosuoritukset.aspx>  YO: <https://vipunen.fi/fi-fi/yliopisto/Sivut/Opintosuoritukset.aspx>  Remark! Check vipunen guidance on “Ohjeet” paragraph “Raportin perustiedot”. Some of columns already include other values from columns. |  | All degrees should be listed here (including MAS, but without CAS or DAS) |
| **Personnel and end users** |  |  |  |
| Total students (FTE)\* | Public gov-source: vipunen.fi-service  IT-secretary either collect this or is checking it. |  | The number of students (headcount) and not FTE should be listed here. |
| Number of enrolled degree students\* | Public gov-source: vipunen.fi-service. Remark! Degree students enrolled as present or absent at 20.9. |  |  |
| Total personnel (FTEs)\* | Public gov-source: vipunen.fi-service  IT-secretary either collect this or is checking it |  | If you have many part-time employees, the number of employees (headcount) should also be included |
| Number of active user accounts | Most likely to found from IAM/IdM-service of HEI. If there is a large transformation going on in IAM/IdM services (e.g. lot of test id’s) do not include those. |  | If possible, the data from the central directory or intent management should be used here. |

## Cost And FTE –sheet

| **Question** | **Finnish** | **Norwegian** | **Swiss** |
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| Cause effect | If HEI invested in device for some reason, this reason dictates the where to allocate cost. E.g. if HEI bought a storage system because Communications needs space for their publication system 🡪 *Business applications: Communications*, even though it later can be used for other purposes also. |  |  |
| What are centralized IT cost? | All centralized IT costs: incl. travel, coffee makers, cleaning and other maintenance, unit’s secretary … |  |  |
| Does it matter who is paying the bill? | No matter who is the initial payer (e.g. if Suomen Akatemia is financing service, as long payments are handled by HEI) |  |  |
| Allocation of cost | If centralized IT is billing faculty 🡪 faculty’ IT cost (=Distributed)  *If it doesn’t send an invoice, is it centralized costs?* |  |  |
| Internal invoicing | Do not include internal invoicing. Only transactions with an organization outside HEI. Suppliers, other services providers etc. |  |  |
| A computer which is guiding a research appliance | Not a IT cost if you cannot use this computer for other purposes. |  |  |
| Tools and services for faculty / department of information technology | If those devices/services are as a research objects, not IT cost. IF there is a IT class room to be used for teaching 🡪 IT cost |  |  |
| Government subvention | Gov. subvented e.g. 41% of Funet costs. No costs included from CSC’s free of charge services. |  |  |
| **Accounts** |  |  |  |
| HW/SW: Network devices and their software | Some network devices have some software which is essentially just for this particular device. This software can be included in Hardware-account |  |  |
| Staff costs | HEI pays salary (and usually other mandatory payments like social security payments). Not every one (in services) can have same salary |  |  |
| Outsourcing | Person sends an invoice for e.g. his/her consultancy services |  | Also includes leasing, external services such as project management, consulting, cloud etc. / Explanation in the auxiliary document: Purchased IT services like cloud computing, costs of an outsourced data center, workstations, networking etc |
| Facilities |  |  | Office space costs and data center space costs should be divided among the services if possible.  • The calculation for offices: total area / number of FTE = initial situation \* extrapolate number of FTE.  • The data center costs are calculated individually. The BFE calculation table can be used as an aid. |
| IT FTE | If there is a staff cost, same row must have IT FTE value and vice versa. |  |  |
| **Services & Subservices** |  |  |  |
| Operational infrastructure costs | Devices and software which cannot be allocated specifically to any business service. E.g. Microsoft Azure | *Facilities:* Data center costs *Outsourcing:* Uninett: Feide. eCampus, certificate service |  |
| Workstations, client and peripherals | *HW*: Actual device (laptop, destop) and all appliances it needs (mouse, screen, memory sticks) *SW*: some basic software installed automatically for each device (e.g. MS Office, photo editing,…) and licenses for maintaining device. If software is for teaching or research 🡪 accordingly *Staff*: those IT people dedicated to installing or maintaining devices. (Others to IT SD/HD) *Outsourcing*: recycle of devices | SW: Adobe, Photoshop, MS Desktop *Staff*: Server side, software packaging, maintaining devices | IT classrooms, “classroom installations” or e-assessment infrastructure can be listed here. |
| Printing and other peripherals | *HW/SW*: printing devices which are bought or leased to HEI.  *Outsourcing*: if printing service is truly outsourced |  |  |
| IT Service Desk / Helpdesk | SD/HD staff costs, tools and special software (ticketing system)  *Facilities*: SD/HD’s office spaces | Admin users on various applications should not be counted. AV support is applied to *AV* and *Teaching*. | Only includes 1st level support / call agents and not all employees who provide support. |
| Fixed networks | Fixed network devices and software to control them. Maintenance and support cost. | SW: support agreements Outsourcing: line rental, purchase of services for cabling, fitters etc. | Includes all network lines (SWITCH, other providers) as well as costs for maintenance contracts |
| Wireless networks | Specifically WLAN devices and software | HW: access points Outsourcing: Eduroam, guest networks, rental of antennas |  |
| Voice services / Telephony | Phones and telephone exchange. All types of phone devices (mobile or other) and their software | HW: mobile phones, wireless routers, USB routers, USB mobile office, chargers etc. | Costs for the provider’s telephone connections |
| Voice services/phone calls | Actual phone call costs and also mobile data | Subscription and traffic costs |  |
| Business applications: Financial | Financial applications, bookkeeping, reporting incl. travel services. Also accounting systems used by other units like library payments etc. Certia/SAP to *Outsourcing* |  |  |
| Business applications: HR | HR software, employee payments (salaries, expenses) Certia/SAP to *Outsourcing* |  |  |
| Business applications: Facilities | This is IT services for property maintenance and control. E.g. surveillance & alarm systems, resource booking. Info screens and their systems.  (Note! Only some of electric bills are IT costs.) |  |  |
| Business applications: Communications | Web services (for HEIs communications), intranet, email, common discussion board software, chat services. If these are not specifically for research/teaching purposes (e.g. Moodle) |  | In addition to the mail and communication systems, collaboration solutions such as SharePoint, Connections, etc. must also be taken into account here. |
| Business applications: Student administration systems | SIS (Peppi & Sisu) |  |  |
| Business applications: Teaching | Moodle and other LMS IT class rooms, devices, softwares (excludeing MS A5 licenses), which are not included in *Workstations* service |  |  |
| Business applications: Research administration | All research project services |  |  |
| Business applications: Research | Special software for research purposes e.g. statistical analysis. Research databases and data storage. *Staff costs*: people supporting research IT but not doing actual research. |  |  |
| Business applications: Library | Library systems e.g. ALMA, Finna, KOHA (excluding licenses for e-books and journals). Note! software for library fees to *Financial service* |  | Library solutions are listed here. |
| IT management etc. | CIO, centralized IT’s secretarial services, EA |  | Only the top management hierarchy (head of department, head of department) is listed here. Staff is not divided. For example, a network group manager is assigned to the service network, but the IT infrastructure department manager (if he is assigned to the highest hierarchy level) is assigned to IT management. Staff departments such as portfolio management, purchasing, etc. are also listed here. |
| IT security | *Staff*: CISO staff costs  CSOC Note! incident management should be allocated to appropriate service.  Virus detection software (not MS Defrender if in all devices 🡪 *Workstations*).  Firewall? VPN  IT security training, consultation and audit.  Expenses caused by security attack |  | Only people who do 100% or the majority of IT security are listed here, i.e. an IT security officer or similar. Operational IT security such as firewall administration, patch management or similar is assigned to the services. |
| Audiovisual services | AV technology and specialists.  Zoom-licenses. MS Teams might not be in this category: does it belong to *Communications*? |  |  |

## Volumes sheet

| **Question** | **Finnish** | **Norwegian** | **Swiss** |
| --- | --- | --- | --- |
| (Column names) Organisation responsible for machine maintenance or for service etc. |  |  | All values should be determined for all organizational units as far as possible. It is advisable not to simply forward the Excel, but to ask specific questions and involve the decentralized units at an early stage. |
| Server environment, logical servers |  |  | All servers exclusively HPC, these are recorded under HPC. |
| Server environment |  |  | Host systems for Virtual Machines must also be listed. The recommendation is to list these under "number of other unspecified servers". |
| Number of virtualised servers |  |  | No virtual clients (VDI) are listed here. |
| Network storages / Size of raw storage |  |  | Only storage systems and archives should be listed here. Tape backups should not be listed. Question to the project team: Should “block storage” for VM systems also be listed? |
| Amount of storage (TB) in cloud storages | Cloud storage, which is purchased from service provider. If it is “unlimited”, it rarely is. Give some estimate. Make a note. |  |  |
| What are workstations | Devices that are ‘controlled’ and purchased by HEI. Not researcher own devices. Note! Smart phones are not workstations |  | If the exact numbers are not available, it is advisable to make an estimate based on values from the directories. |
| Number of computers for personal use | Devices for staff use |  |  |
| Number of computers in student classrooms | Devices for student use in specific IT classrooms or other public spaces. |  |  |
| Number of computers in research laboratories | Specifically for research use dedicated devices |  |  |
| Number of side printers attached to workstations | Printers which are not in shared use. If no exact number available, give an estimate (make a note) |  |  |
| Number of printing devices. Type other than above or unspecified | Special printers for printing e.g. large format printouts (e.g. banderole) |  |  |
| Number of IT personnel handling tickets | People who actually solve tickets, not those, who just dispatch it forward or bosses ‘check’ |  |  |
| Voice services and connections |  | number of mobile phones and distinguish between smartphones and simple phones. | What is meant here is the number and not the devices (see also the BM help document) |
| Data networks / Number of maximum simultaneous WLAN users |  |  | The value of maximum simultaneous connections and not the number of simultaneous users should be entered here. |
| Virtual workstations |  |  | This refers to all virtual clients including Citrix, VMWare, terminal service, regardless of the hardware client used (fat, thin). |
| Floor space (in square meters) dedicated to IT services / Other IT areas dedicated to e.g. IT personnel workrooms |  |  | Enter the effective values here, if available, for the IT staff's office space. Alternatively, an FTE x 13m2, for example, can be used |