Belgisch Instituut voor
postdiensten en telecommunicatie

Mededeling van de Raad van het BIPT van 30 januari 2025 betreffende de conformiteit van het kostentoerekeningssysteem van Proximus voor het jaar 2022

Belgisch Instituut voor postdiensten en telecommunicatie
Koning Albert II-laan 32 bus 10 | 1000 Brussel
T +32 2 226 88 88 | **F** +32 2 226 88 77 | **www.bipt.be**

INHOUDSOPGAVE

1. VOORWERP

1. Met deze mededeling publiceert het BIPT, gebaseerd op het controleverslag van de bedrijfsrevisor die hiervoor werd aangesteld, de overeenstemmingsverklaring voor het **kostentoerekeningssysteem van Proximus voor het jaar 2022**, ter uitvoering van de verplichting tot kostentoerekening van Proximus zoals opgelegd in het besluit van 29 juni 2018 betreffende de analyse van de markten voor breedband en omroep (verder: besluit van 29 juni 2018)[1] en overeenkomstig artikel 62, § 4, van de wet van 13 juni 2005 betreffende de elektronische communicatie[2] (hierna "de wet van 13 juni 2005").

2. Een kostentoerekeningssysteem (of *cost accounting system*) is een geheel van regels aan de hand waarvan de kosten, inkomsten en ingezet kapitaal van een onderneming over haar verschillende diensten en activiteiten kunnen worden verdeeld. Het kostentoerekeningssysteem omvat met name de middelen (processen, basisgegevens, procedures…) waarmee de onderneming de nodige informatie kan registreren om te voldoen aan zijn wettelijke en reglementaire verplichtingen, met name door zijn inkomsten, kosten, activa en kapitaal blijvend te traceren. Het kostentoerekeningssysteem moet de regulator in staat stellen om over informatie te beschikken over de kosten van de diensten die aan regulering onderworpen zijn, en op die basis te bepalen of een operator zijn wettelijke en reglementaire verplichtingen is nagekomen.

[1] Het marktanalysebesluit van 13 december 2019 betreffende de analyse van de markt voor hoogwaardige toegang bevat gelijkaardige bepalingen.

Wet van 13 juni 2005 betreffende de elektronische communicatie, *B.S.*, 20 juni 2005, 28070, zoals gewijzigd bij wet van31 mei 2024 houdende diverse bepalingen inzake economie *B.S.* 31 mei 2024, 68973.

2. RETROACTA

3. Proximus heeft op 26 november 2024 het BIPT de volgende documenten bezorgd:

- Het verslag van opdracht van onafhankelijke verzekering van de auditeur met betrekking tot het systeem voor kostentoerekening opgesteld door Proximus;
- De vertrouwelijke versie van de functionele documentatie;
- De openbare versie van deze functionele documentatie;
- Het gedetailleerde en vertrouwelijke verslag van de werkzaamheden van de onafhankelijke auditeur.

3. JURIDISCHE BASIS

4. Artikel 62, § 4, van de wet van 13 juni 2005 bepaalt dat "Het Instituut zorgt ervoor dat, wanneer de invoering van een kostentoerekeningssysteem verplicht wordt gesteld met het oog op prijscontrole, een beschrijving van dit systeem voor het publiek beschikbaar wordt gesteld waarin ten minste de hoofdcategorieën waarin ten minste de kosten worden ingedeeld en de voor de toerekening van de kosten toegepaste regels worden vermeld. De inachtneming van het kostentoerekeningssysteem wordt op kosten van de onderneming geverifieerd door een erkend revisor, die elk jaar een verklaring van overeenstemming opstelt, welke door het Instituut wordt gepubliceerd."

5. Naar aanleiding van verschillende besluiten van de Raad van het BIPT werd de verplichting op Proximus opgelegd om een kostentoerekeningssysteem op te zetten. Tabel 1 geeft weer op welke markten en via welke marktanalysebesluiten een verplichting tot kostentoerekeningssysteem is opgelegd op Proximus.

Relevante markten[3]		**Besluit van BIPT / CRC**
2020 - 1	Lokale toegang op wholesaleniveau	29/06/2018
2014 - 3b	Centrale toegang op wholesaleniveau	29/06/2018

Tabel 1: Overzicht van de markten waarop op Proximus een kostentoerekeningsverplichting werd opgelegd

6. Het besluit van het BIPT van 29 juni 2018[4] (bijlage H) heeft de voorwaarden bepaald waaraan Proximus moet voldoen bij de toepassing van zijn kostentoerekeningssysteem.[5] Die voorwaarden hebben betrekking op de algemene principes, de kwaliteit van de informatie, de toerekenings- en evaluatieregels, de documentatie, de beschrijving en de controle van het kostentoerekeningssysteem, alsook op de na te leven termijnen.

[3] Hier genummerd in overeenstemming met Aanbevelingen van de Europese Commissie betreffende relevante producten- en dienstenmarkten in de elektronischecommunicatiesector die overeenkomstig Richtlijn 2002/21/EG van het Europees Parlement en de Raad inzake een gemeenschappelijk regelgevingskader voor elektronischecommunicatienetwerken en -diensten aan regelgeving ex ante kunnen worden onderworpen.

[4] Besluit van de Raad van het BIPT van 29 juni 2018 betreffende de analyse van de markten voor breedband en televisieomroep

[5] Evenals het Marktanalysebesluit van 13 december 2019, bijlage B.

4. VASTSTELLINGEN VAN HET BIPT

7. Het BIPT heeft nagekeken of de opdracht die Proximus aan de bedrijfsrevisor heeft toevertrouwd, voldeed aan de voorschriften van bijlage H van het besluit van het BIPT van 29 juni 2018, namelijk: de relevantie verifiëren van de omtrek van de kosten en inkomsten, de inachtneming van de basisvereisten verifiëren, de toepassing van de toewijzings- en evaluatieregels verifiëren en een verslag overleggen aan het BIPT over de uitvoering van zijn opdracht.[6]

8. Het BIPT heeft vastgesteld dat Proximus de uitvoering van de audit heeft toevertrouwd aan Deloitte Bedrijfsrevisoren BV.[7]

9. Het BIPT heeft vastgesteld dat de inhoud van de functionele documentatie en van de openbare beschrijving van het kostentoerekeningssysteem voldeed aan de voorschriften van de delen H.3. (Toepasselijke regels en voor te bereiden documentatie) en H.4. (Beschrijving van het kostentoerekeningssysteem) van het besluit van het BIPT van 29 juni 2018.

10. Overeenkomstig het besluit van 29 juni 2018 (Bijlage H) moet de bedrijfsrevisor nagaan of de toegepaste toewijzings- en herwaarderingsregels wel beantwoorden aan de documentatie die door Proximus is voorbereid en aan de beschrijving van het kostentoerekeningssysteem.

11. Op basis van de controleverslagen van de bedrijfsrevisor concludeert het BIPT dat het Proximus-kostentoerekeningssysteem voor het jaar 2022 in alle opzichten voldoet aan alle materiële aspecten, aan het wettelijk kader dat werd vastgelegd door de wet van 13 juni 2005 en het besluit van het BIPT van 29 juni 2018.

12. De conclusies van de bedrijfsrevisor voor 2022 zijn opgenomen in bijlage 1 bij deze mededeling.

13. In bijlage 2 wordt een beschrijving van het kostentoerekeningssysteem van Proximus van 2022, opgesteld door Proximus, weergegeven.

[6] Bijlage B van het Besluit van de Raad van het BIPT van 13 december 2019 bevat gelijkaardige verplichtingen.
[7] Luchthaven Nationaal 1J, Gateway Building, 1930 Zaventem.

5. HANDTEKENINGEN

Bernardo Herman
lid van de Raad

Peggy Valcke
lid van de Raad

Stefaan Vyverman
lid van de Raad

Michel Van Bellinghen
voorzitter van de Raad

Bijlage 1: Conclusie van de bedrijfsrevisor voor het jaar 2022

Verslag over het Kostentoerekeningssysteem over het boekjaar afgesloten op 31 december 2022

Aan de raad van bestuur en de directie van Proximus NV van publiek recht

Opdracht

Wij hebben de eer u verslag uit te brengen over de uitvoering van de beoordelingsopdracht die ons werd toevertrouwd door Proximus NV van publiek recht (de "Vennootschap") gericht op het verkrijgen van een redelijke mate van zekerheid omtrent het naleven van haar wettelijke verplichtingen met betrekking tot het Kostentoerekeningssysteem, zoals hierna gedefinieerd, voor het boekjaar afgesloten op 31 december 2022. Het kostentoerekeningssysteem bestaat uit een geheel van regels aan de hand waarvan de kosten, inkomsten en ingezet kapitaal van een onderneming over haar verschillende diensten en activiteiten kunnen worden verdeeld (het "Kostentoerekeningssysteem"). Dit Kostentoerekeningssysteem is door de Vennootschap gedocumenteerd in bijgevoegd rapport "Proximus Regulatory Cost Model 2022 – General description".

Wij hebben de van toepassing zijnde besluiten van het Belgisch Instituut voor Post- en Telecommunicatie (het "BIPT") evenals de toepasselijke wetgeving gehanteerd als toetsingskader voor onze opdracht, met name:

- Belgische Wet van 13 juni 2005 betreffende de elektronische communicatie, zoals (onder meer) gewijzigd door de wet van 18 mei 2009 en de wet van 10 juli 2012;
- Het besluit van de Raad van het BIPT van 22 augustus 2007 betreffende de uitvoering van de verplichting voor Proximus om een kostentoerekeningssysteem in te stellen;
- Belgische Wet van 5 mei 2017 betreffende de audiovisuele mediadiensten in het tweetalig gebied Brussel-Hoofdstad;
- Het besluit van de Raad van het BIPT van 29 juni 2018 betreffende de analyse van de markten voor breedband en televisieoproep.

Deze wetten en besluiten (het "Wettelijk Kader") zijn als criteria gebruikt in de evaluatie van het Kostentoerekeningssysteem.

Verantwoordelijkheid van de directie en de raad van bestuur

Het opstellen van het Kostentoerekeningssysteem is de verantwoordelijkheid van de directie en de raad van bestuur van de Vennootschap. Deze verantwoordelijkheid omvat onder meer het ontwerp en de toepassing van een kostentoerekeningssysteem dat beantwoordt aan de basisprincipes van causaliteit, objectiviteit, consistentie en transparantie zoals voorgeschreven in het hoger vermeld Wettelijk Kader.

Verantwoordelijkheid van de bedrijfsrevisor

Het is onze verantwoordelijkheid om op basis van onze werkzaamheden een oordeel tot uitdrukking te brengen of het Kostentoerekeningssysteem opgemaakt door Proximus NV van publiek recht voor het jaar eindigend op 31 december 2022, in alle materiële opzichten werd opgesteld overeenkomstig de bepalingen van het Wettelijk Kader. Wij hebben de beoordelingsopdracht over het Kostentoerekeningssysteem uitgevoerd overeenkomstig de International Standards on Assurance Engagements (ISAE 3000), van toepassing op opdrachten gericht op het verkrijgen van een redelijke mate van zekerheid.

Reikwijdte van een opdracht gericht op het verkrijgen van een redelijke mate van zekerheid

Een opdracht gericht op het verkrijgen van een redelijke met van zekerheid van het Kostentoerekeningssysteem, uitgevoerd overeenkomstig de International Standard on Assurance Engagements (ISAE 3000), bestaat uit het verkrijgen van controle-informatie over de in het Kostentoerekeningssysteem opgenomen bedragen, het verzoeken om inlichtingen, in hoofdzaak bij de personen verantwoordelijk voor regulatoire en financiële aangelegenheden, alsmede uit het uitvoeren van cijferanalyses en andere werkzaamheden van een opdracht gericht op het verkrijgen van een redelijke mate van zekerheid. Onze belangrijkste werkzaamheden bestonden uit:

- Het aansluiten van de gegevens weerhouden in de kostenbasis met de jaarrekening van Proximus NV van publiek recht per 31 december 2022;
- Het controleren van de groeperingen van boekhoudgegevens alsook van de relevantie van die groeperingen in het kader van de huidige rapportering;
- Het identificeren en valideren van de belangrijkste wijzigingen in het Kostentoerekeningssysteem en het bespreken hiervan met de directie;
- Het reconciliëren van de invoer- en uitvoergegevens voor een willekeurige selectie van kostenmodules;
- Voor een willekeurige selectie van verdeelsleutels:
  - Nagaan welke de brongegevens zijn voor deze verdeelsleutel en op welke manier deze werden bepaald;
  - Het causale verband bespreken en valideren tussen de brongegevens, de verdeelsleutel, en de bestemming;
  - Nagaan of de verdeelsleutels objectief werden bepaald en consistent en transparant werden toegepast;
  - Nagaan of de gebruikte verdeelsleutels correct berekend en toegepast zijn;
  - Nagaan of de onderliggende informatie die gebruikt werd in de berekeningen in alle materiële aspecten betrouwbaar, relevant, vergelijkbaar en controleerbaar is;
  - Nagaan of de niet-financiële gegevens die dienen voor de berekening van de verdeelsleutels correct en betrouwbaar zijn;
  - De methodes verifiëren inzake afschrijvingen, kapitaalkosten en waardering van de activa;
  - Nagaan of de besluiten van het BIPT en de aanbevelingen die in vorige audits geformuleerd zijn, werden nageleefd;
  - Nagaan of de toegepaste toewijzing- en herwaarderingsregels beantwoorden aan de documentatie die door de Vennootschap werd voorbereid en aan de beschrijving van het Kostentoerekeningssysteem;
  - Valideren of de gebruikte regels voor het toewijzen van de kosten voldoende uitvoerig worden beschreven om de relatie tussen de kosten en de tarifering van de netwerkelementen en diensten duidelijk tot uiting te laten komen;

Wij zijn van mening dat de door ons verkregen controle-informatie voldoende en geschikt is om daarop ons oordeel te baseren.

Conclusie

Naar ons oordeel, werd het Kostentoerekeningssysteem opgemaakt door Proximus NV van publiek recht voor het jaar eindigend op 31 december 2022, in alle materiële opzichten, opgesteld overeenkomstig de bepalingen van het Wettelijk Kader.

Dit verslag is opgesteld in het kader van de verplichtingen van de Vennootschap onder het Wettelijk Kader en mag niet voor andere doeleinden worden gebruikt.

Getekend te Zaventem.

De bedrijfsrevisor

Digitally signed by
Koen Neijens
DocuSign
Signed By: Koen Neijens (Signature)
Signing Time: 20-nov-2024 | 15:27 CET
C: BE
Issuer: Citizen CA
2A8E2DCFD59C4E1FB8A5EA30AB0224A5

Deloitte Bedrijfsrevisoren BV
Vertegenwoordigd door Koen Neijens

Bijlage : Proximus Regulatory Cost Model 2022 – General description

Bijlage 2: Beschrijving van het kostentoerekeningssysteem van Proximus voor 2022

Proximus Regulatory Cost Model 2022

General Description

Authors:

DIEU Peter

DOOMS Françoise

GORSHECHNIKOVA Anastasiia

NYSSENS Cécile

VANDENPLAS Danny

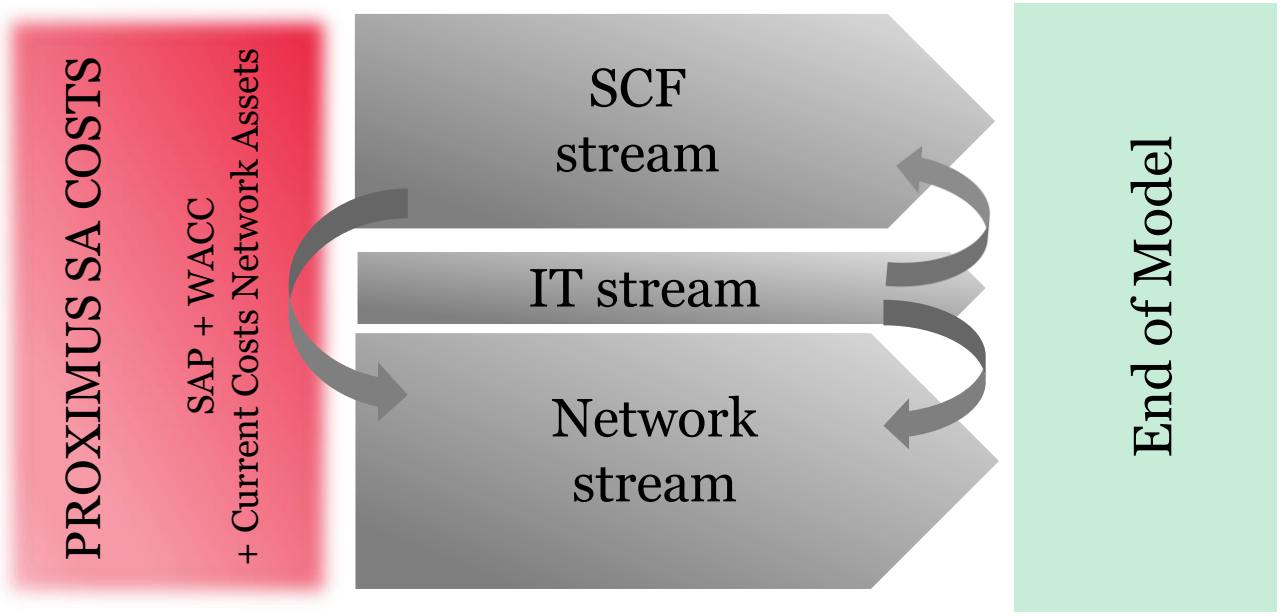
TABLE OF CONTENTS

1 General description

REG (Group Regulatory Affairs) department sets up the Regulatory Cost accounting system, also referred as the cost model. In accordance with European Commission recommendations, the entire costs of statutory accounts are included in the cost model, to the exception of statutory accounts 65 to 68, as well as some other accounts excluded from the cost model perimeter. As said, the cost basis of the cost model is directly issued from the general accounting of Proximus SA, as recorded in SAP accounting tool. Statutory accounts 2022 of Proximus SA have been audited by Deloitte, external auditors. Deloitte auditors issued an unqualified opinion on statutory accounts.

The cost model allocates costs of Network/IT and SCF (Support and Customer flow), as included in the general accounting of Proximus SA, as well as the cost of capital of these two modules.

The following chart illustrates the Cost accounting system, as well as main allocation flows. The whole costs included in the allocation process are loaded in a tool (Telecom Costs Expert Software, referred as TCE) that runs accuracy tests and prevents double costs counting or multiple allocations.



SCF allocation flows include costs that are of service to the customer and other direct and indirect costs that are not included in the Network nor IT allocation flows.

Network and IT flows include all the costs related to the Network and Information & Communication technology.

Costs allocated in allocations flows SCF, Network and IT have the same cost basis origin, this later being SAP statutory accounts of Proximus SA. IT tool TCE, in past models named INCA, makes validity checks to prevent any double counting and trace allocated costs from their unique SAP cost basis origin to their final destination.

The Cost model is a top-down model.

2 Model Allocation Structure

This section provides with a global view on the allocation structure of the model by walking through the major allocation flows and introducing the major building blocks and concepts in the model.

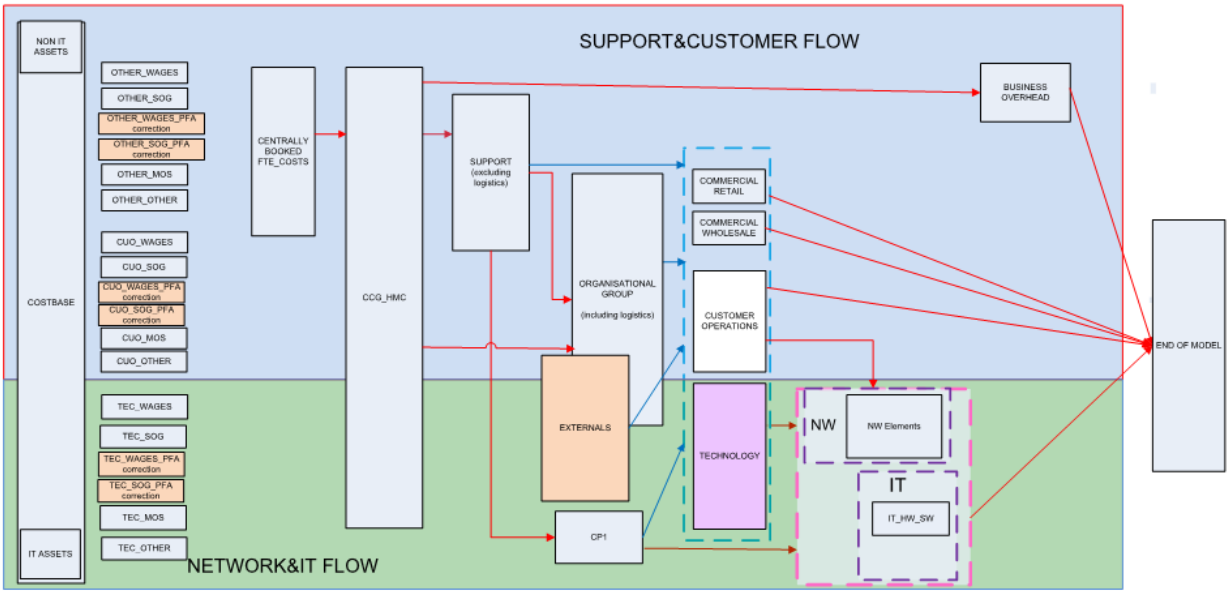
The following Figures will be the supporting tools for such discovery walk, where the major modules constituting the model as well as the global allocation flows among them are shown. The differentiation between SCF, Network and IT flows is also illustrated in the exhibit.

The overall objective of the model is sending all the attributable costs present in the cost base to some differentiating modules, which allocate costs, prior to be sent to the final destination module "End Of Model".

Therefore, the cost base constitutes the foundation of the model.

Further, the model allocation process is subdivided into three main streams, SCF, Network and IT.

The Cost base settings and the Non IT assets are presented in chapter 3.



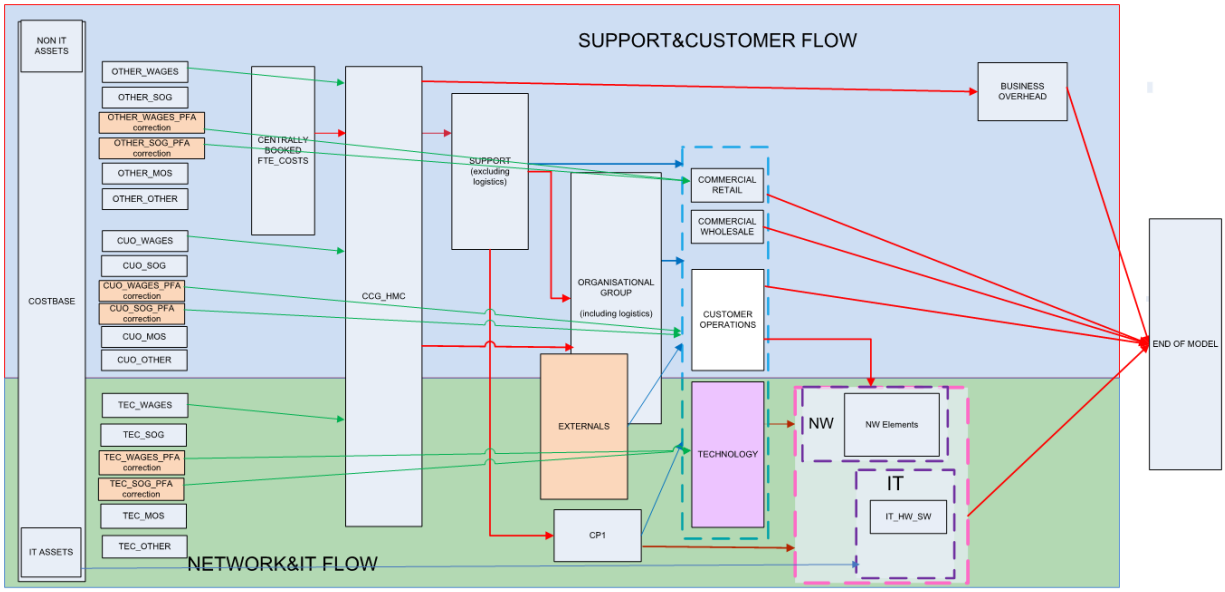
The SCF stream has as objective to allocate all costs that are not part of the Network or IT model towards the markets.

SCF stream (chapter 4) encompasses Staff & Support, Commercial Retail, Commercial Wholesale and Customer operations costs.

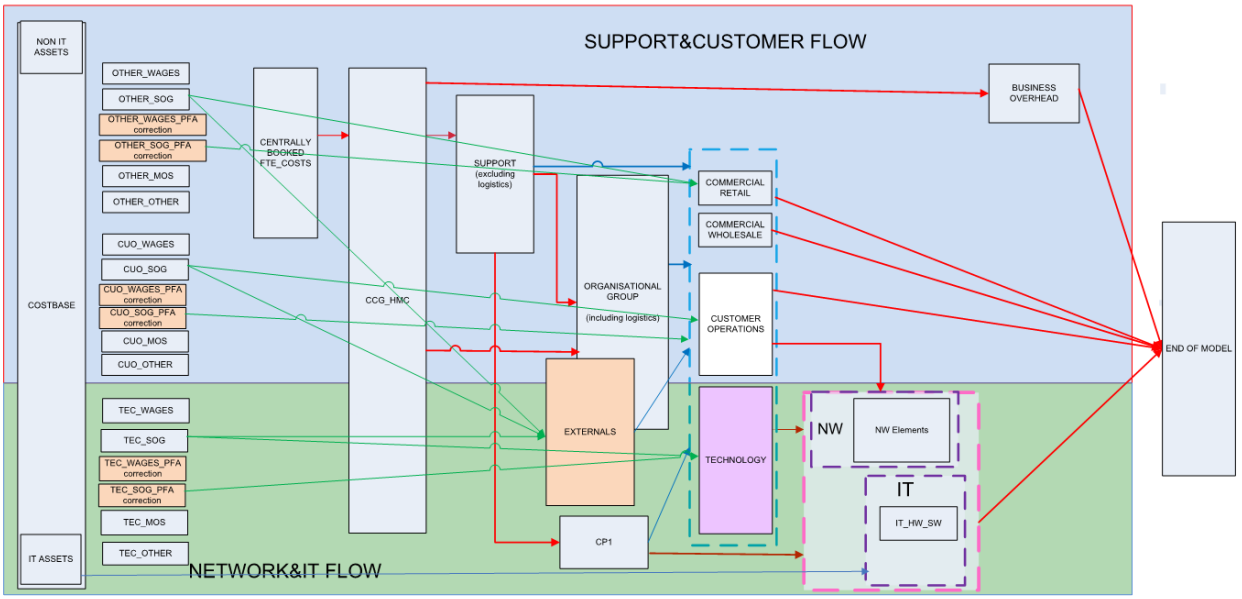
The IT and Network streams, although having completely separated CAPEX basis, both share a common OPEX source.

OPEX of IT and Network streams are handled via allocation of costs of Network business unit and Digital Transformation & IT business unit. Those 2 business units are gathered in the model in the Technology business unit (chapter 5).

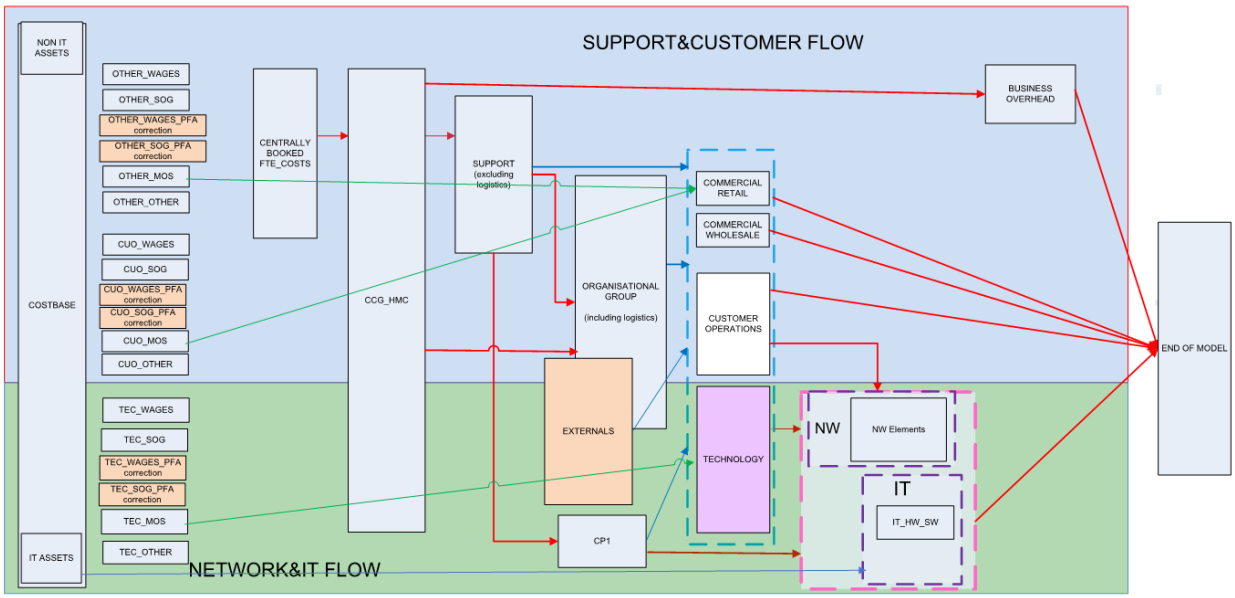
WAGES OPEX allocation flows are as follows:



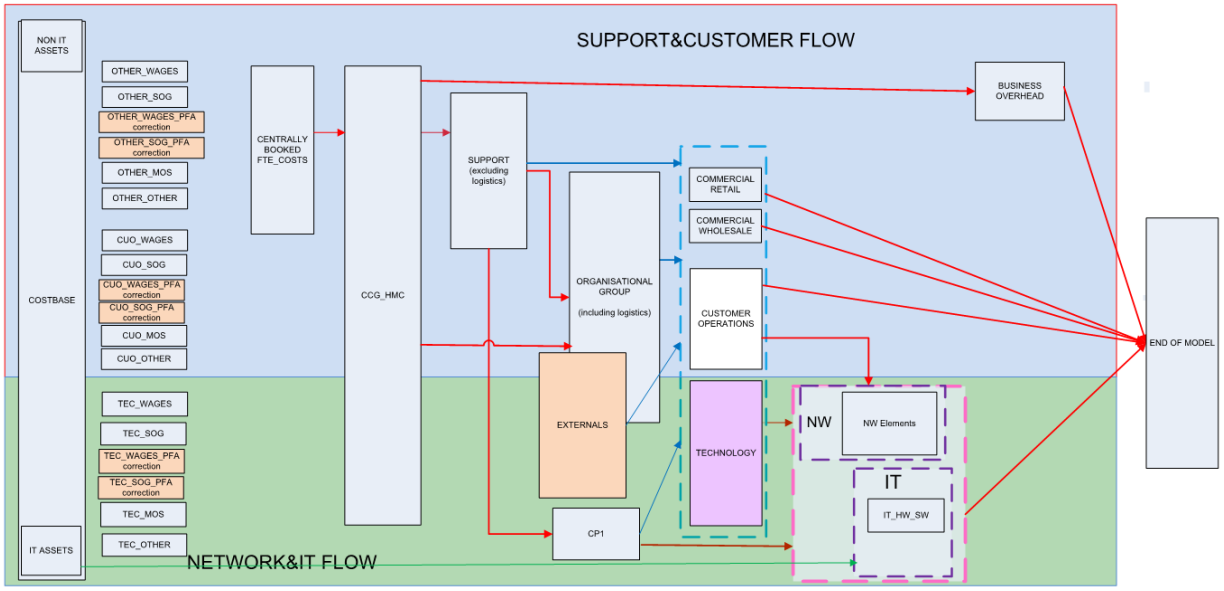
Services and Other Goods OPEX allocation flows are as follows:



Materials out of stock and Other OPEX main allocation flows are as follows:



IT Assets allocation flows are as follows:



3 Cost Base

3.1 Cost model perimeter

3.1.1 Determination of the Cost model perimeter

Costs included in the Cost model are operating charges, i.e. general ledger (GL) accounts 60 to 64 of statutory accounting, as well as part of GL 69.

GL 60 "cost of goods sold" includes mainly telecom equipment purchases (modems, handsets, cables, mobile SIM cards, etc.), small equipment (cpe, …) and stocks movements.

GL 61 « services and other goods » includes primarily costs linked to traffic (a.o. interconnection fees) and operating expenses such as maintenance, utilities, renting, marketing, representation allowances, consultancy, travel fees, etc.

GL 62 corresponds to all personnel costs (wages and other salary benefits).

GL 63 includes depreciation and amortization, stocks and trade receivable accruals for write-off and movements of provisions for liabilities.

GL 64 gathers other operating expenses, including a.o. write-off on trade receivables, immovable withholding tax and local taxes, taxes on pylons, etc.

GL 69 relates to company result appropriation corresponding to the part of personnel in the profit (collective bonus).

At last, GL 72 – « Produced Fixed assets » reduces the cost basis to cancel costs linked to produced fixed assets and to avoid a double counting of these costs with the corresponding depreciation charge.

To the costs perimeter from the general accounting is added the weighted average cost of capital (WACC) of 6,86% for Proximus traditional Fixed products, 8,45 % for Proximus FTTH products and 7,98 % for Proximus Mobile products.

3.1.2 Costs excluded from the Cost model perimeter

Other costs than those mentioned above are excluded from the Cost model. It relates to GL 65 to 69 of general accounting, to the exception mentioned above, for part of GL 69 (share of personnel in profit).

Some costs are excluded since considered as having no causal link to the products and activities. This matters for extraordinary costs (GL 66) and tax costs (GL 67 and 68).

Other costs are excluded since already included in the WACC. This relates to financial costs (GL65) and dividends appropriation (GL 69).

Costs excluded mentioned here above are costs excluded from the Cost model upstream (i.e., when defining Cost model perimeter with costs included in general accounting). On top of these ones, other costs will be excluded downstream in the Cost model, i.e. costs excluded via the allocation flow. E.g.: Support costs involving affiliates.

3.2 Cost regrouping

Proximus books the costs on one hand, on a general ledger account defined in general accounting, and on another hand, on a cost center defined in reporting and analytics accounting. This way to handle costs has for objective to gather data, in order to simplify data processing.

Two types of aggregation are done in the Cost accounting model:

- Aggregation of 677 GL of general accounting in 156 Cost pools (CP)
- Aggregation of 653 cost centers in 159 Cost Centers Groups (CCG).

A **Cost pool** is a group of costs with similar characteristics and issued from the same family of cost natures.

Regarding material resources, gathering of costs is based on the similar function that these costs have. E.g., cost pool "Training expenses" sums up costs of trainings organized inside Proximus, external trainings, training books/e-learning and documentation costs.

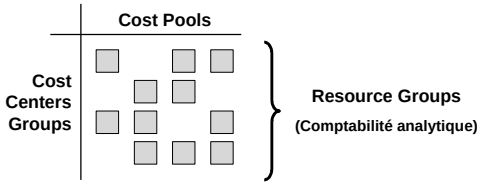
Regarding human resources (referred as FTE, or Full Time Equivalent), cost pools gather workers with the same profile. E.g., cost pool "Level S" includes wages and salaries of employees with level S (Sales force), as well as premiums and other wages benefits paid to these employees.

Costs included in the same cost pool have an identical causal link to the products and activities to which they related. They have the same "resource driver".

A **Cost Center Group (CCG)** sums up cost centers with similar characteristics and realizing similar activities and as a consequence, can be aggregated into the same cost center group.

Each Cost Center Group uses various cost pools.

Combinations cost pool/cost center group constitute the **Resource Groups**. The Resource Groups are the Cost basis of the Cost model.



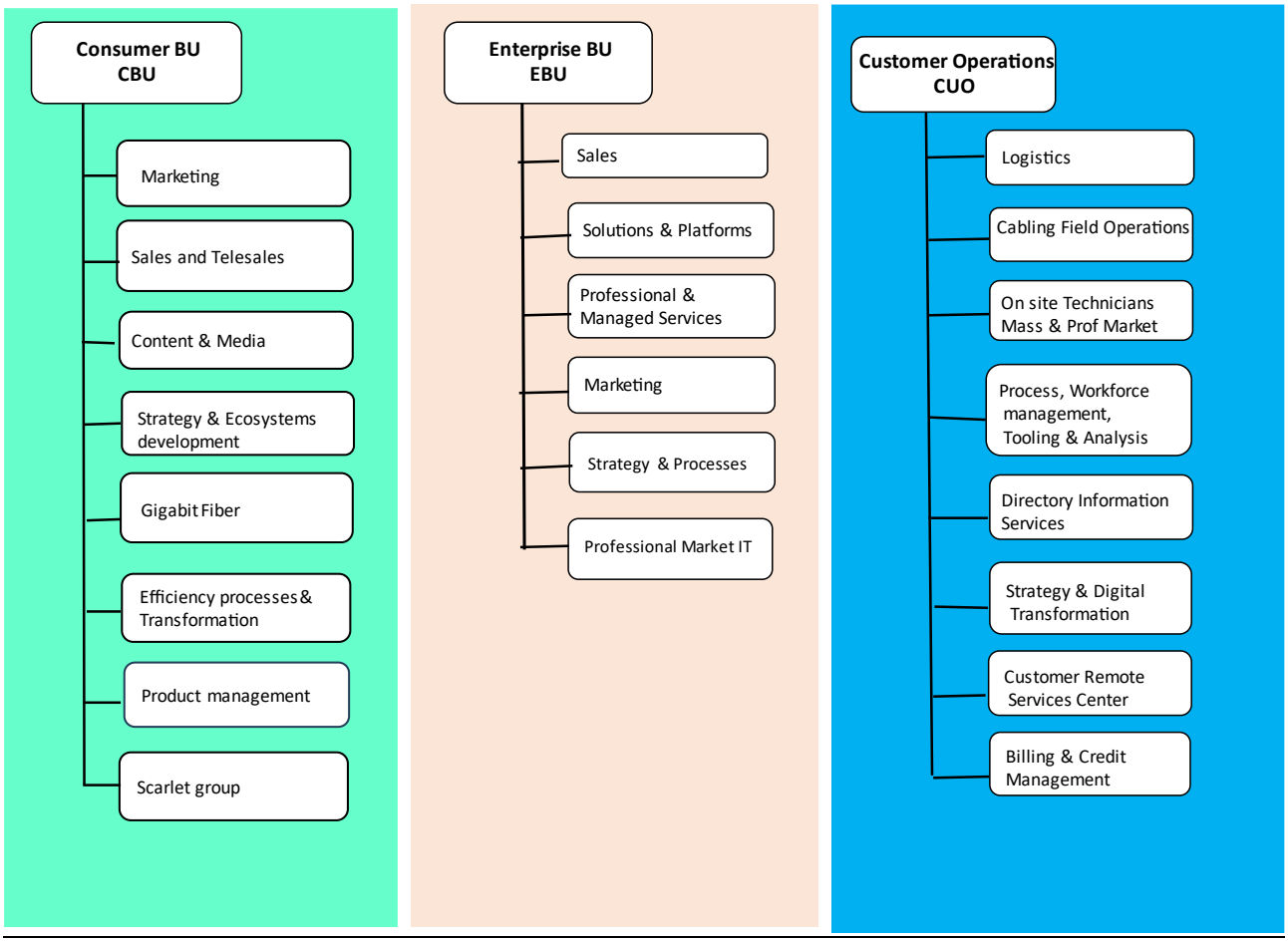
3.3 Organization

Proximus SA has transformed its organization into one based on AGILE processes and operating procedures. This transformation has created many new cost centers, as well as grouping together teams that previously worked separately. The aim is to create more agile, multi-disciplinary teams, to respond more effectively to the needs of customers, defined in segments.

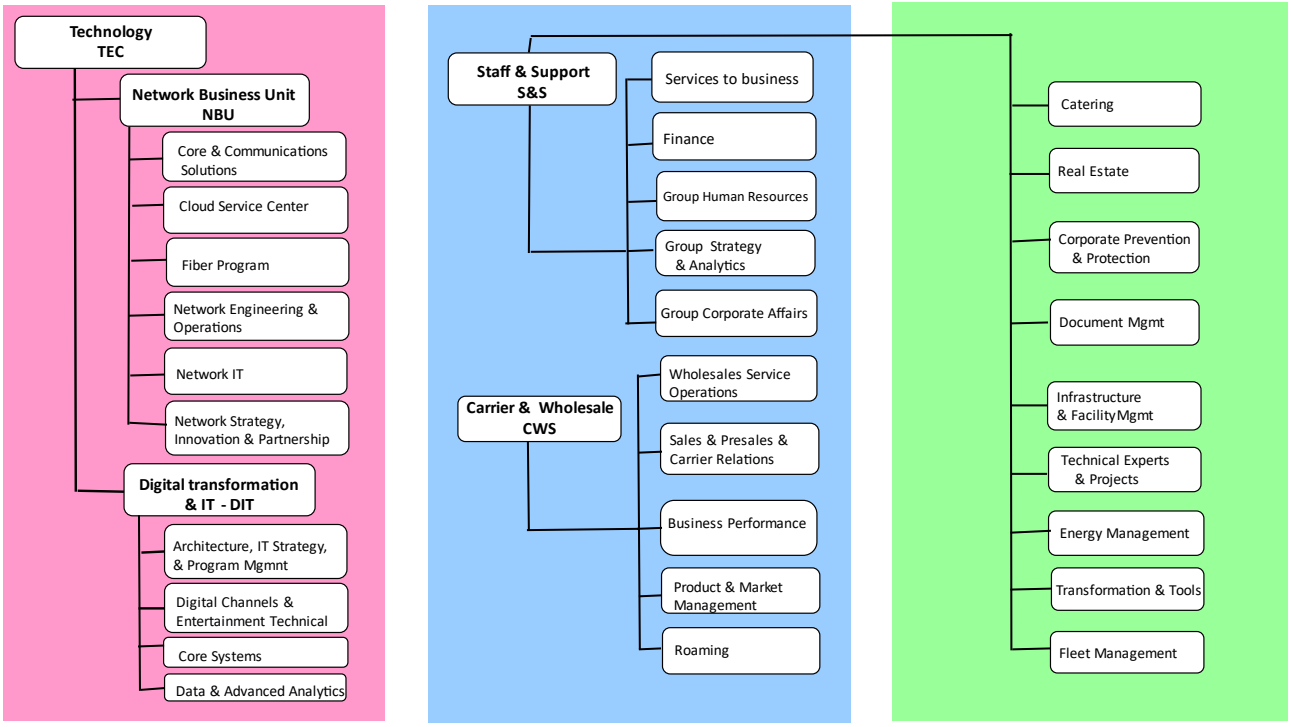
In the Cost base, we are grouping cost centers into main poles that correspond to Proximus SA's organizational structure. Proximus SA is organized into Business Units (BUs).

The following tables show each Business Unit and its activities.

Part Consumer/Residential, Entreprise Business Units and Customer Operations

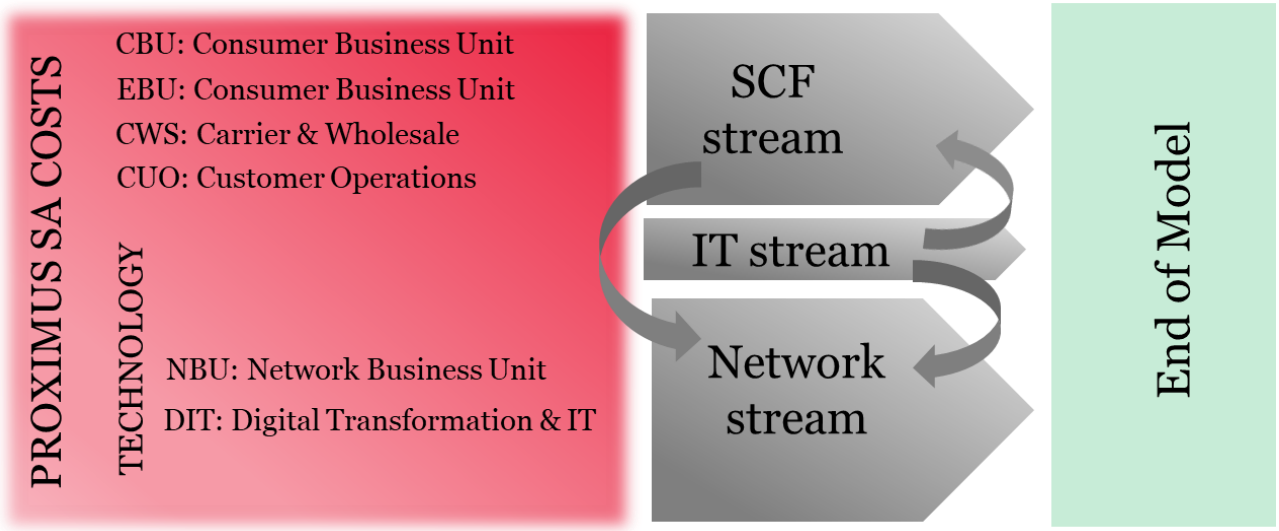


Part Network, Digital & IT, Carrier Wholesale and Staff & Support



- This organisation has a clear split between the residential and professional customers by the divisions Consumer and Enterprise Business units, as well as the wholesale customers with Carrier & Wholesale Business unit,
- The Technology Business unit in the model (referred as TEC) brings together Network and Digital & IT Business units,
- The Customer Operations Business unit gathers all services in direct link with the customer, whether residential consumer or enterprise or wholesale,
- Staff & Support Business unit includes activities of Staff such as Finance, Human Resources, Strategic planning, Group Corporate Affairs (including Legal, Group Public Affairs, Regulatory, Internal audit, Group communications and Secretary General Legal), as well as Support activities. Support activities encompasses internal services like Fleet, Catering, Real estate, Corporate Prevention &Protection (buildings and employees), etc.

Cost perimeter is split by the REG department between allocation flows of Network/IT and Support and Customer flow, after completeness and accuracy checks (no double counting) on costs data from SAP. As mentioned in general description, allocation flow Network/IT allocates all costs and assets (capital expenditure) in IT and Network, while the allocation flow Support and Customer flow allocates costs and assets other than IT and Network related.

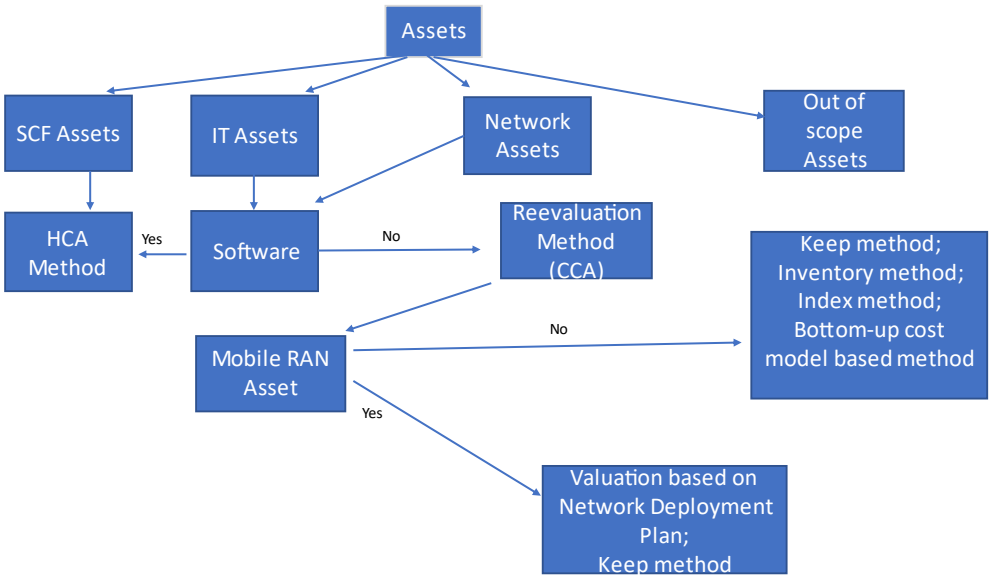


Split of cost perimeter between allocation flows Network/IT and SCF is processed as follows:

- All departments within TEC are treated within the Network / IT flow.
- Provisions for taxes on telecom equipment that are booked at the level of TEC management are downstream shared via allocation flows between assets classes to which they relate.
- All the other costs not mentioned above are treated within the SCF flow namely the divisions CBU (Consumer Business Unit), EBU (Enterprise Business Unit), CWS (Carrier Wholesale), CUO (Customer operations) and Staff & Support. The Staff & Support division comprises different departments, including Executive committee, GCA (Group Corporate Affairs) which includes Legal, Group Public Affairs, Regulatory, Internal audit, Group communications and Secretary General, Finance, Group Human Resources, Group Strategy & Transformation and Support internal services ensured by departments like Real Estate, Energy management, Infrastructure & Facilities management, Corporate Prevention & Protection, Fleet and Catering.
- Regarding Assets (depreciation and WACC), repartition is done based on an analysis of assets classes: assets IT and Network are handled in the allocation flow Network/IT, while all other assets (buildings, utilities equipment, CPE, etc.) are allocated in the flow SCF.

3.4 Assets revaluation

3.4.1 Decision tree



Sensitivity: Internal Use Only - Only for Proximus business use. See more on https://www.proximus.com/respect -confidentiality

3.4.2 Changes in assets valuation

Voice platform:

Valuation based on keep method, no more on BIPT bottom-up model that is outdated.

Broadband platform (NGA active, NGA housing):

Based on actual inventory and actual costs, no more on BIPT pricing decision model

Backbone network (MPLS, DWDM):

Based on new internal bottom-up model, no more on BIPT bottom-up model (dating from 2011);

SDH network is no longer valued as no more in service.

Revision of keep method for some assets based on an analysis to detect renewal investments as much as possible and avoid double counting.

3.4.3 Methods used to reevaluate the network assets

The regulatory framework clearly states that the cost accounting systems of operators being declared as dominant on relevant markets must be set based on Current cost accounting for the network costs.

The network & IT flows within the top down model calculate the current costs for the network related assets. Current costs have been computed as explained hereafter.

There are four methods to evaluate the current value of the network: reassessment of the current inventory, price indexation, by default "keep everything as it is" and bottom-up cost model based. For mobile radio access networks assets, the valuation is based on the forecasted expenses of Proximus for the active radio equipment in the joint venture. Each of these methods requires its own set of inputs. It is mainly the availability (or lack) of input which dictates the choice of the method. Nevertheless, each method has its advantages and disadvantages with respect to the others.

The inventory method assumes that network departments replace the equipment of its assets by equivalent equipment. The notion of equivalent is quite fuzzy. An engineer would tell you that over time there are always more functions integrated in new equipment and that they are always more cost-effective. It makes the comparison between different generations of equipment difficult. The notion of equivalent has therefore been addressed through the term Modern Equivalent Asset (MEA). The assets must be replaced by their MEA. The MEA is the replacement cost of the technology expected to be in place within the planning horizon. Note that this notion takes into account the introduction speed of a new technology in the network. If network departments plan to have replaced 50% of an old technology by a new one within the planning horizon, it makes no sense to simulate the costs with higher percentages because the planning takes into account the availability of the resources to carry out the work.

Find hereafter the rules that have been used:

- Technology still in procurement: use current price, e.g. IP equipment
- Technology to be replaced within the planning horizon: use current price of the modern equivalent asset, e.g. TDM based voice equipment are replaced by IP based voice equipment.
- Technology grouped in : those assets will be revaluated by another asset concerning the same technology
- Old technology not anymore in service : those assets are set out of scope and will not be revaluated
- Old assets revaluated by keep method will keep the CAV value as GRC
- Assets related to the backbone networks : use bottom-up cost models to directly calculate CAPEX costs with 2022 demand volumes

3.4.3.1 *Inventory*

This is the best method to reflect accurately the price of assets currently in service in the network. The revaluation is merely performed by multiplying the volume of each specific type of equipment currently deployed in the network by its average current unit cost. The current unit costs are based on the prices defined in the current frame agreements we have with our suppliers.

In terms of inputs it is the most demanding method. It requires an extensive inventory of equipment.

3.4.3.2 *Keep as it is.*

The "keep as it is" method is merely what its name says. We keep the price we have in the historical accounting books.

3.4.3.3 *Asset valuation based on bottom-up cost models*

The market for fixed telecommunication services, the related technologies and the competition have evolved through the years leading to the current situation where the vast majority of the telecom services provided by the Proximus's access and area backbone networks are regulated. This regulation has been enforced, amongst other initiatives, by the regulator adopting bottom-up cost models to derive the required CAPEX based on demand.

For the assets related to the backbone networks (transport services), Proximus also chooses to calculate their current values based on a bottom-up cost model for MPLS and DWDM networks.

3.4.3.4 *Price Indexation*

This is the most straightforward approach, provided historical costs are available. The investments for each year are multiplied by the price index of the year concerned. The price index is equal to the ratio of the current price to the historical price of the equivalent service/product.

The method is refined by defining price indexes depending on the nature of the cost. This is particularly true when costs of a different nature experienced a different price evolution. Three different types of price indices have been defined: the labour index, the indices for services delivered by external companies and the material index.

3.4.4 TAM: Tilted Annuity Method

3.4.4.1 *Theory*

The purpose of this section is to describe how the Tilted Annuity Method (TAM) is finally implemented in the Current Cost Accounting (CCA) based network cost model.

As from the 2003 model, Proximus implemented the formula that BIPT suggested.

$$ACC\mu Y = F1, \mu Y \times F2, \mu Y$$

where

$F1, \mu Y = (GRC\mu Y, begin + GRC\ \mu Y, end)/2$

$F2, \mu Y = \sqrt{}(1 + WACCY) \times [\ 1 - (1 + APC\mu)/(1 + WACCY)\ ] / [1 - [(1 + APC\mu)/(1 + WACCY)]\ ^\wedge\ L\mu]$

and where

- ACCμY: Annual CAPEX Cost of asset μ and year Y. It includes the annual depreciation and the cost of capital.
- WACCY: WACC of year Y.
- GRCμY, begin: Gross Replacement Cost of asset μ at the beginning of year Y.
- GRC μY, end: Gross Replacement Cost of asset μ at the end of year Y.
- APCμ : Annual Price Change of asset μ .
- Lμ : Lifetime of asset μ.

Remarks:

The formula assumes that:

- In the beginning of year Y was invested in an asset and that at the middle of each year of the lifetime of the asset revenues will be generated.
- The annual price change is constant over the lifetime of the asset.
- The asset price does not evolve during the year, i.e. price changes only appear at January 1st.

The factor F1, μY represents the value of asset μ in the middle of year Y.

- The purpose of the arithmetic average of GRCμY, begin and GRC μY, end is to take into account investments or disinvestments of asset μ during the year Y.
- The arithmetic average of GRCμY, begin and GRC μY, end does not filter out the price evolution of the asset μ during the year Y.

The difference between the formula of BIPT and the formula of Exhibit 5, p. B3. of the white paper of Analysys is the factor $1 / \sqrt{}(1 + APC\mu)$, which filters out the price evolution of the asset μ during the year Y.

The gross replacement cost (GRC) of assets at any particular point in time is calculated as the sum over all assets owned by the business at that point in time, of the investment that would be necessary to purchase and install new replacements for those assets at that point in time (using modern equivalent assets if the existing assets are no longer available or efficient). The replacement value of assets, used for costing purposes should always include the gross value of every asset in use by the

business (the current cost of replacing it with a new, possibly modern equivalent asset), irrespective of the history of depreciation of that asset in any financial accounts to date.

L_μ : Lifetime of asset μ, i.e. the expected useful lifetime of the new asset μ.

The depreciation period and the expected useful lifetime of a new asset are defined differently. The depreciation period refers to accounting. The expected useful lifetime of a new asset does not refer to accounting. It refers to the period that is expected that a new asset will be used. The main factor to determine the expected useful lifetime of a new asset is the evolution of the associated operational costs, i.e. the asset will be replaced when operating it becomes too expensive. Another factor is the appearance of new technology: if in the future new technology will come-up it could be that the asset will be replaced (even if it is not too expensive to operate).

4 SCF (Support and Customer Flow) stream

4.1 Allocation of the Support costs

4.1.1 Support Scope

All Support costs are treated within one SUPPORT module and as such, no cascade principle is used meaning that support costs, once in the SUPPORT module, can only be allocated to a non-support destination and to a non-support division. The divisions that are considered as Support costs are:

- Group Internal Services (GIS) for departments like Real Estate, Business Services, Security, Safety & Environment, and Catering.
- Supply Chain Management (SCM) responsible for warehousing, logistics and distribution.
- Infrastructure Facility Management (IFM) which encompasses a wide variety of support activities like building & technical services, print shops and copy shops, energy and operational centre of excellence.
- Fleet Management (FLT) for the support of all Proximus management, utility, and sales vehicles.
- Procurement (PRO) for the negotiation and contracting of all purchase contracts.

OPEX (Operational Expenditure) Support costs can be “Services & other goods” costs (e.g.: energy costs, renting costs for building, security guarding) but also “Wages” of FTE working in the Support departments, as presented here above.

OPEX Support costs can also be “Accruals”, for litigations or other matters linked to the Support activities, and “Other” costs such as taxes (withholding taxes, local taxes, taxes on pylons, on fleet vehicles, …).

ASSET Support costs are also identified within the Asset Base. These latter’s correspond to the assets used for the support activities.

Depending on the nature of the costs, the allocations flow differs.

- “Services & other goods”, “accruals” and “other” costs, identified as Support costs in the Cost base, are allocated from the Cost base to the Support module
- FTE costs (“Wages” costs and directly attributable costs to FTE) are first gathered in the CCG_HMC module, prior to be allocated to the Support module.

It should be noted that training costs are pooled from the Cost base, to the module CENTRALLY_BOOKED_COSTS, prior to be allocated to their respective CCG, in the destination module CCG_HMC.

Module CCG_HMC gathers indeed all internals FTE costs, added with directly related costs.

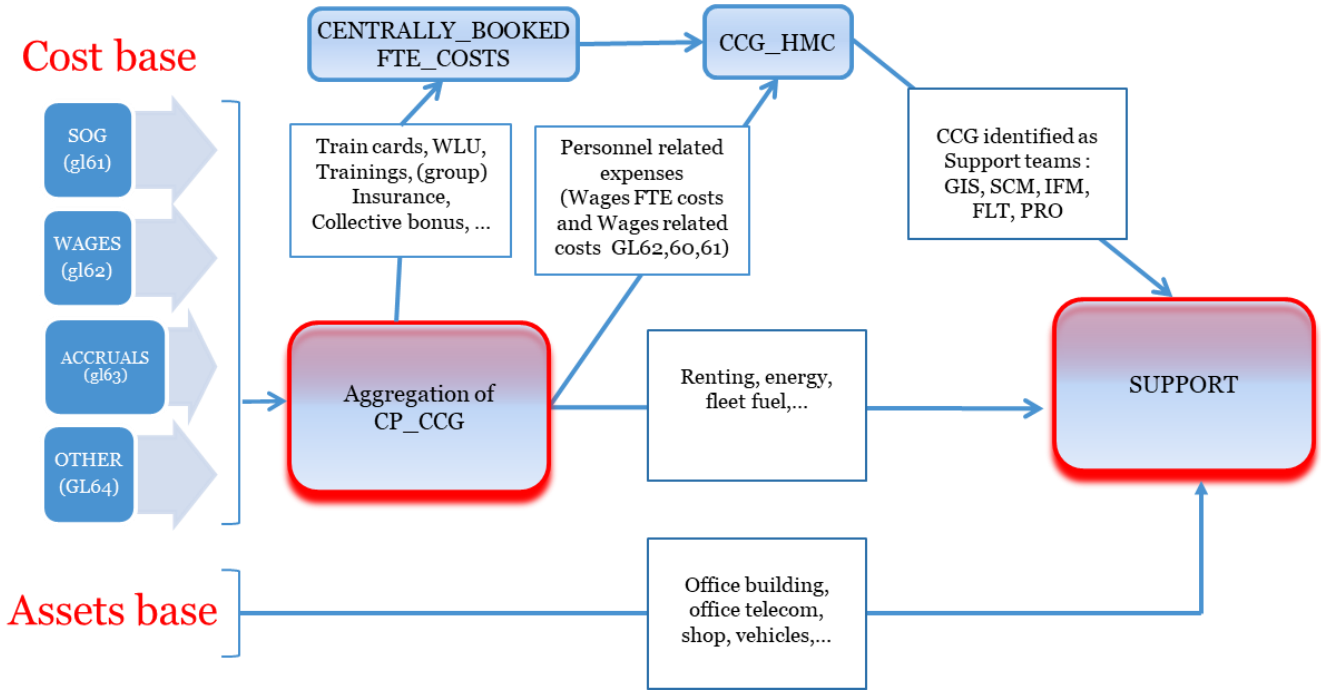
From the module CCG_HMC, the Cost Center Groups with FTE who make part of teams identified as Support teams, will then be allocated towards Support objects, in the destination SUPPORT module.

Mainly, FTE costs are gathered in one Support object but for some teams, such as the teams in charge of SCM (Supply Chain Management) and of IFM (Infrastructure & Facility Management), the FTE costs are split between several objects of the SUPPORT module. The split is based on FTE templates, fulfilled by the Team's responsible.

- ASSETS Support are allocated from the Asset base to the destination SUPPORT module.

Support costs are either directly attributed, or via allocation keys, to a destination Support object, in the SUPPORT module.

The overall scope of the SUPPORT costs and their aggregation in the SUPPORT module can be summarized as follows:



4.1.2 Support Cost Objects

The following support objects were created in order to pool support-related costs within one module, before allocating them either directly to the cost's specific object located further on in the cost model, either to multiple objects using inventory-based allocation keys. This work is achieved by using reports from dedicated teams supporting an inventory from which specific volumes can be derived, such as the ones from fleet management regarding Proximus vehicle's park or Connect Immo regarding the building's occupation. A last group of support objects are allocated by the use of FTE keys in order to split these costs among all departments that benefit from them.

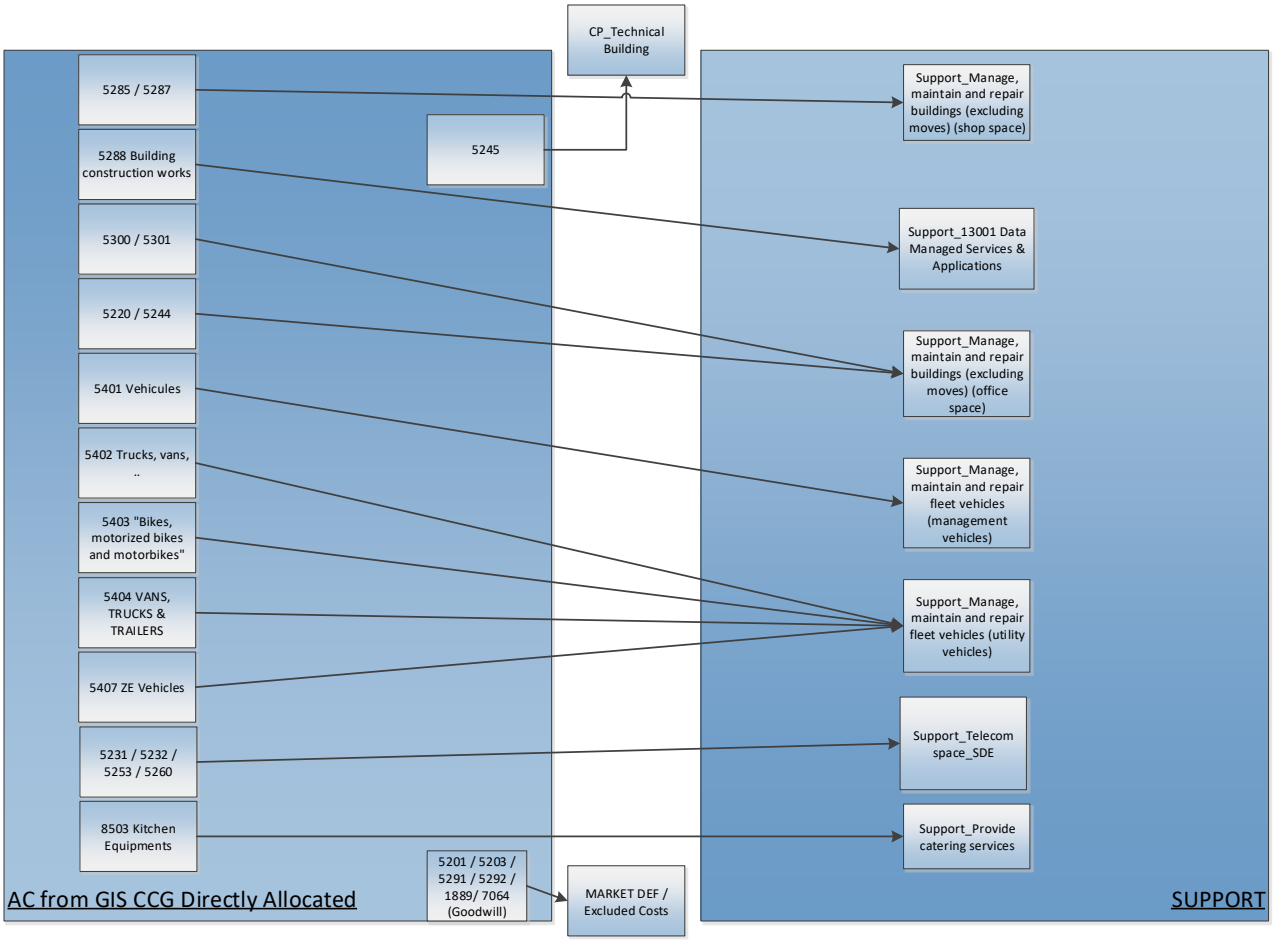
The table below lists the Support object and the key used to allocate the Support object, to a non Support destination object in the costs model.

Driver	Support object
%Stock Consumptions quantities	
	Support_Manage goods, warehouse & equivalents
	Support_Manage waste and scrap, warehouse goods
	Support_Reverse_logistics
Avg # FTE ALL LEVELS with office excl. support/centrally booked	
	Support_Internal mail services
	Support_Manage moves
	Support_Manage waste and scrap
	Support_Manage, maintain and repair buildings (excluding moves) (office space)
	Support_Provide catering services
	Support_Provide copy services
Copper and Fibre cables MOS in meters	
	Support_Manage cables
direct	
	CBU_billing_fix products
	CWS_Billing
	EBU_billing_fix products
	MOB_billing
	Support_13001 Data Managed Services & Applications
	Support_14001 TV and VoD
	Support_15001 CPE GSM
	Support_22243 Nat. IC - infra. Co-location /Co-mingling
	Support_30000 Subsidiaries & externals
	Support_50000 Out of scope
	Support_IT
	Support_Manage, maintain and repair buildings (excluding moves) (shop space)
	Support_Power Chain for ROP
	Support_Power Chain for telecom_SDE
	Support_PROX_Pylons
	Support_Telecom space_SDE
Nbr Management Cars	
	Support_Manage, maintain and repair fleet vehicles (management vehicles)
Nbr Sales Cars	
	Support_Manage, maintain and repair fleet vehicles (sales vehicles)
Nbr Utility Cars	
	Support_Manage, maintain and repair fleet vehicles (utility vehicles)
Sum of Purchase Orders	
	Support_Purchasing, quality and ordering
Value of material transported from stock (in eur)	
	Support_Manage internal distribution

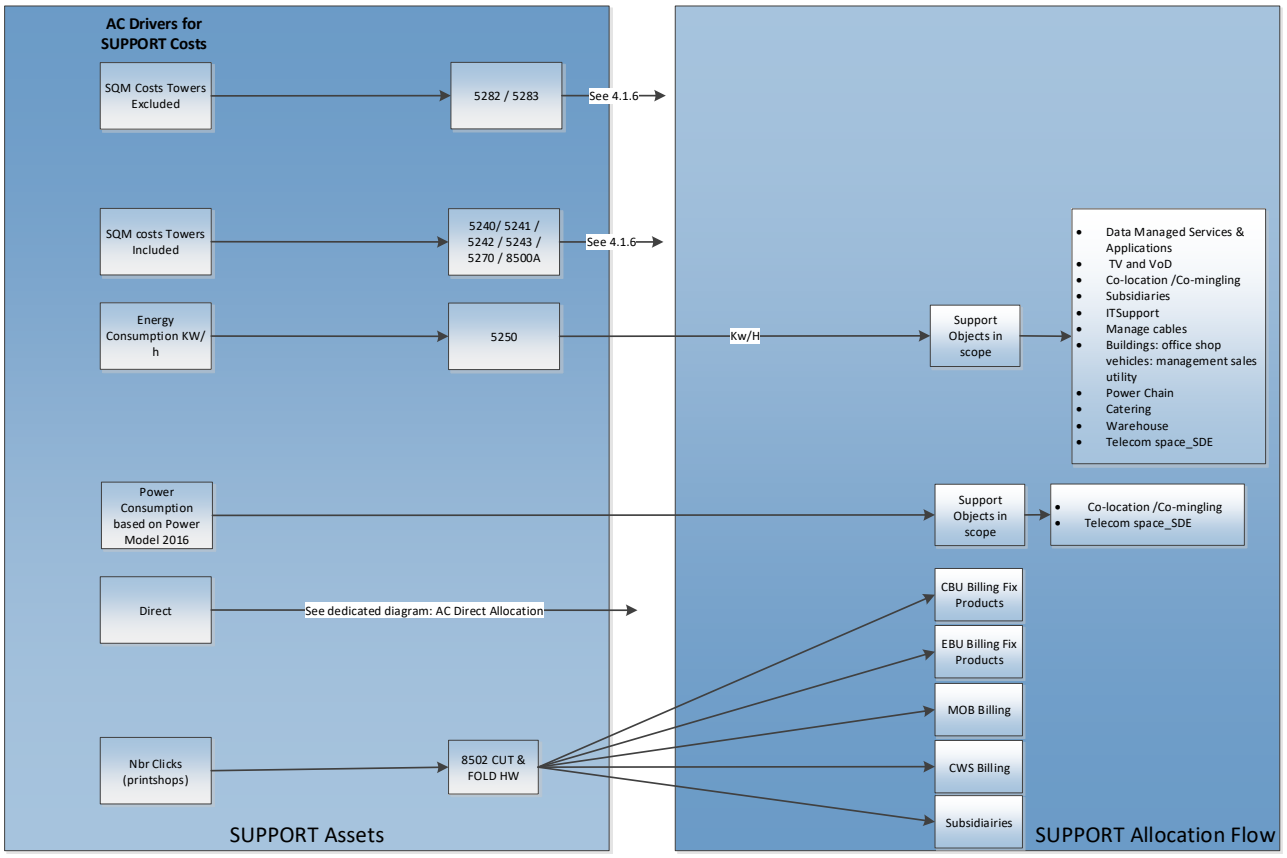
The driver named “Avg # FTE All Levels with office excl. support/centrally booked” is a specific driver calculated internally by the cost modelling team. It excludes from its scope all support divisions and teams that do not benefit from these costs such as employees not occupying a desk in Proximus Buildings. Typically, the Sales FTE, who do not receive *Office space occupation* Support costs, but well *Shop space occupation* Support costs.

4.1.3 Asset Support Allocation

Two types of assets allocations can be distinguished: The ones that can be directly linked to a support object from the previous list and allocated as shown by the following diagram:

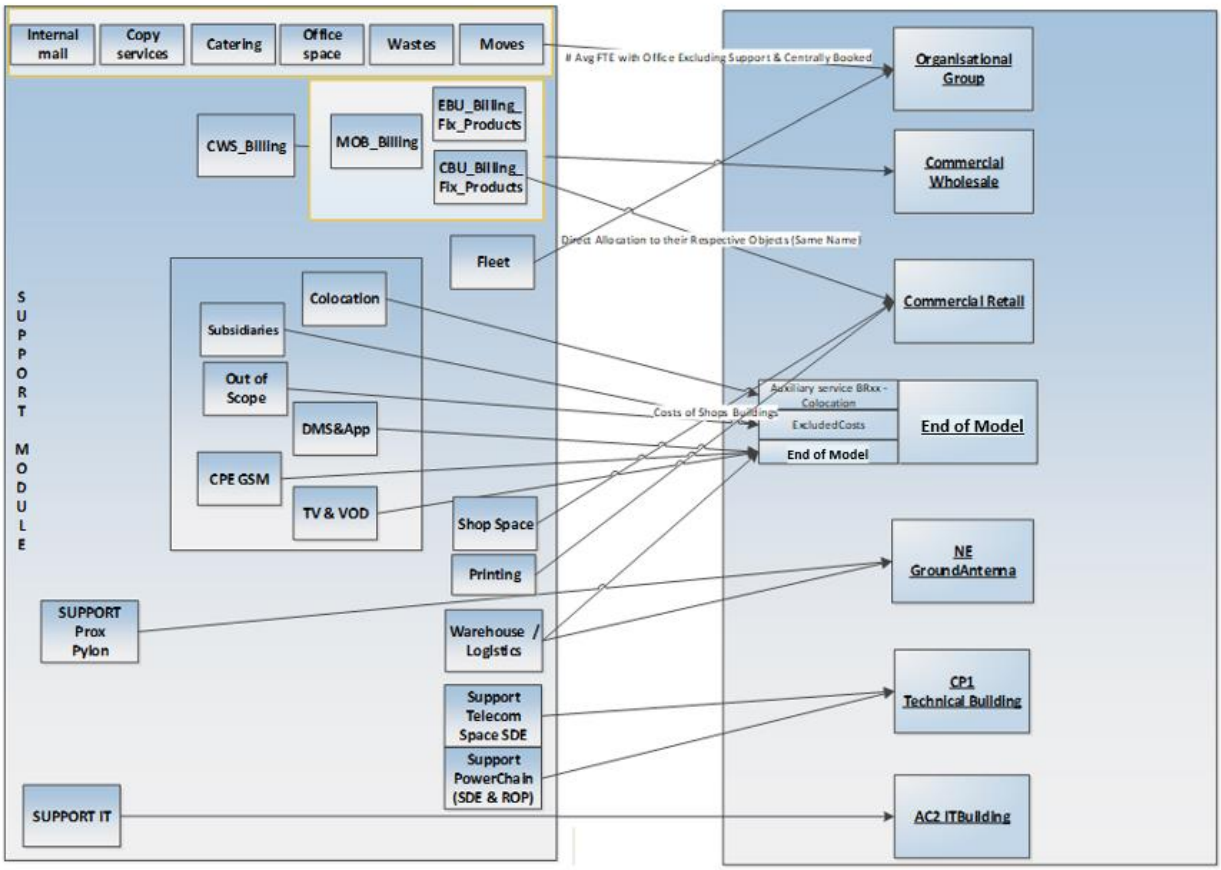


Other assets affect multiple support activities where the use of a specific cost driver is required. Typically, buildings, fleet and energy are support activities that need to be ventilated on many support objects with the use of their corresponding driver: vehicles per category for fleet, square meters occupied per building type for buildings and electricity consumption per equipment or building for energy. The following diagram represents the logic behind asset allocation towards the support flow by presenting its main allocation drivers:


AC Drivers for SUPPORT Costs
SQM Costs Towers Excluded
5282 / 5283
See 4.1.6
SQM costs Towers Included
5240/ 5241 / 5242 / 5243 / 5270 / 8500A
See 4.1.6
Energy Consumption KW/ h
5250
Kw/H
Support Objects in scope
Data Managed Services & Applications
TV and VoD
Co-location /Co-mingling
Subsidiaries
ITSupport
Manage cables
Buildings: office shop vehicles: management sales utility
Power Chain
Catering
Warehouse
Telecom space_SDE
Power Consumption based on Power Model 2016
Support Objects in scope
Co-location /Co-mingling
Telecom space_SDE
Direct
See dedicated diagram: AC Direct Allocation
CBU Billing Fix Products
EBU Billing Fix Products
MOB Billing
CWS Billing
Subsidiairies
Nbr Clicks (printshops)
8502 CUT & FOLD HW
SUPPORT Assets
SUPPORT Allocation Flow

4.1.4 Allocation From the support module

The same principle as before is applied: if a support object can be directly linked to an object located further on in the cost model, it will be directly allocated to it. Such cases are illustrated in the following drawing:

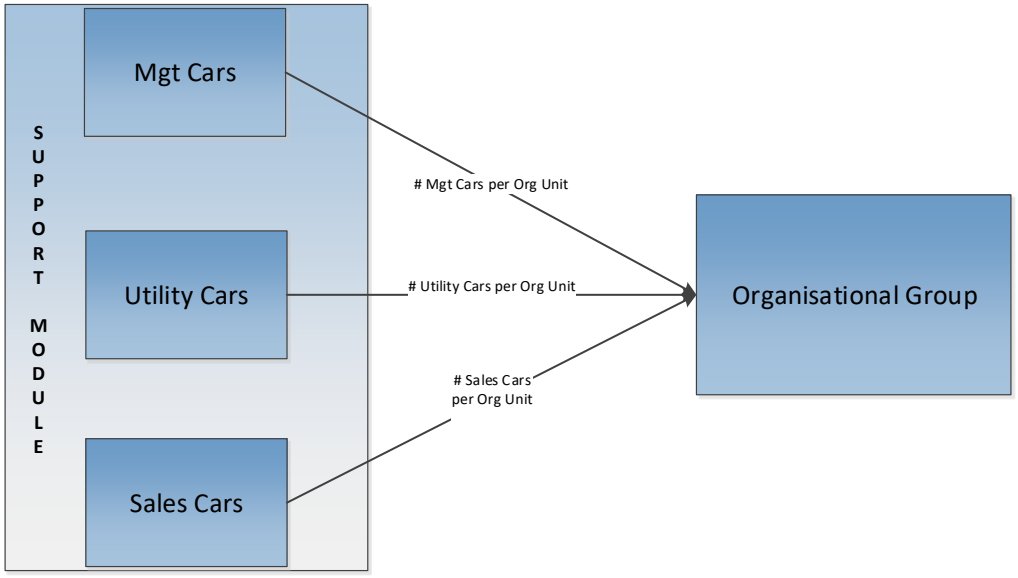


4.1.5 Fleet case

All fleet related costs are pooled in the Support module within the three following objects:

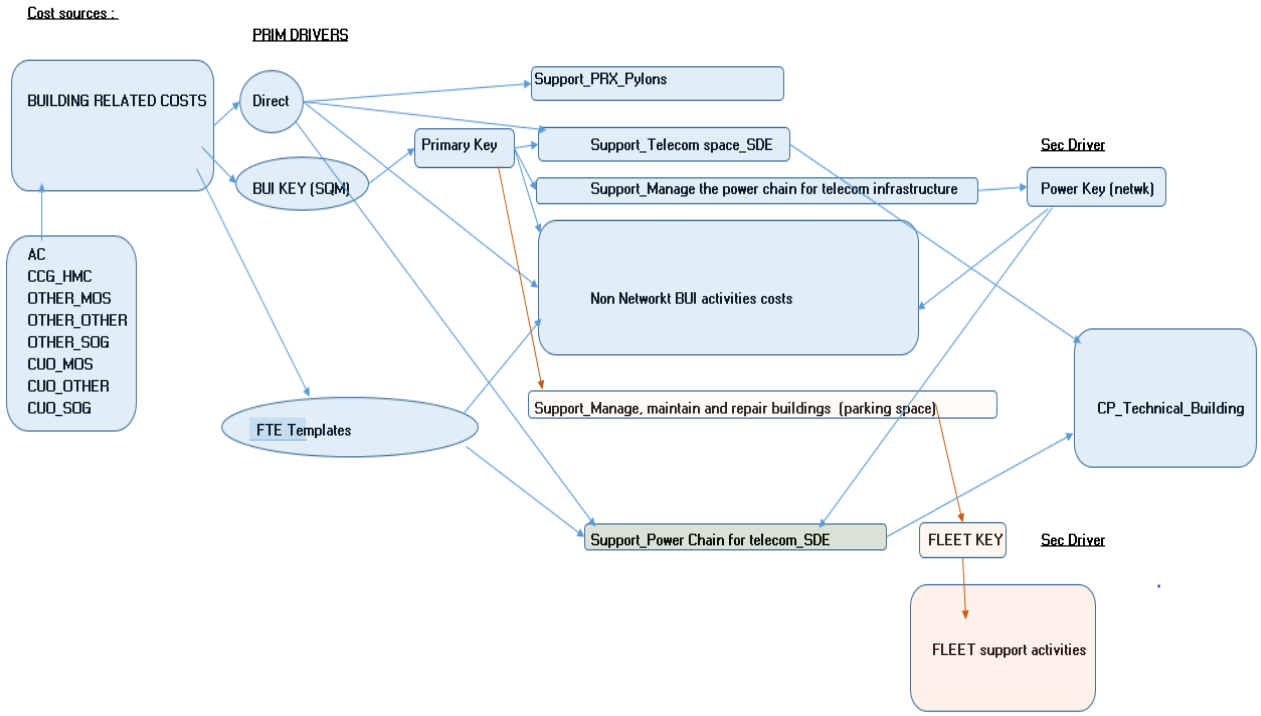
- The support, maintenance and repair of management vehicles.
- The support, maintenance and repair of sales vehicles
- The support, maintenance and repair of Utility vehicles.

With the use of an inventory maintained internally by Proximus, the number of vehicles per type and organisational group is used as an allocation key for the fleet costs.



4.1.6 Buildings Support costs :

4.1.6.1 *Global picture of the allocation:*



4.1.6.2 *Source of the buildings costs :*

The BUI support costs are mainly coming from :

COST NATURE	Source of costs
ASSET	5255 Heating,Ventilation & Air-Conditioning
	5220 Exploitation land
	5240 Exploitation buildings
	5282 Work in rented building
WAGES	78401 GIS - IFM - BTS-Building & Technical Services
	34300 GIS - CPP - Securit - Safety & Environment
	78003 GIS - ASP - PRO - Projects
OTHER_OTHER	GIS - IMM - Real Estate / 34100 / tax-building / 6401
	GIS - IMM - Real Estate / 34100 / local taxes / 6407
OTHER_SOG	GIS - IMM - Real Estate / 34100 / building / 61010
	GIS - ENY - Utilities & Support / 78610 / Pylons / 61195
	GIS - CPP - Securit - Safety & Environment / 34300 / building / 61010
	GIS - IFM - BTS-Building & Technical Services / 78401 / building / 61010
	GIS - ENY - Utilities & Support / 78610 / energy / 61060
	GIS - IMM - Real Estate / 34100 / CImmo & third party building & equipm. taxes / 61160
	GIS - MOB - IFM - OTH - PYLONS / 78501 / building / 61010
	GIS - MOB - IFM - OTH - PYLONS / 78501 / energy / 61060

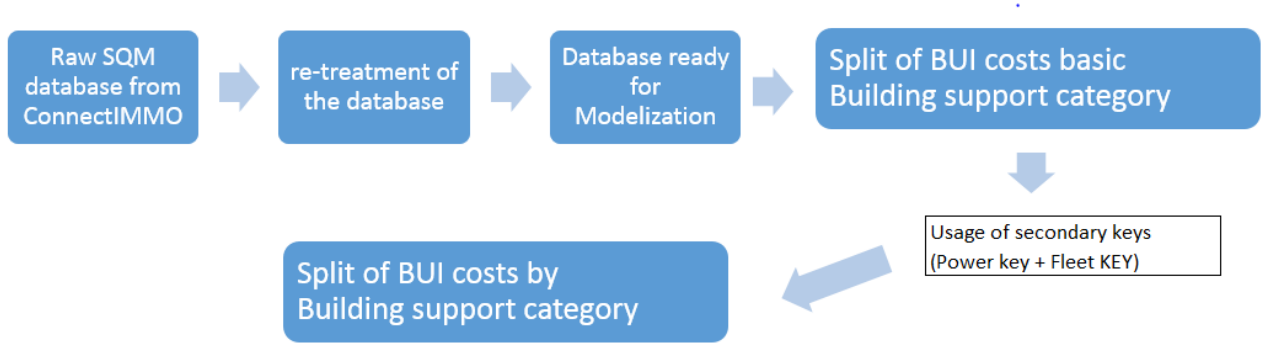
4.1.6.3 *Drivers used for the allocation*

4.1.6.3.1 The SQM (Tower included or excluded).

This key is based on a database provided by ConnectImmo, the Proximus separate entity that manages the PXS Building/SQM portfolios. Volumes (sqm) are valued by category (office, telecom, parking, catering, …) and the resulting keys are used to allocate the costs.

SQM Allocation

sources and process



4.1.6.3.2 Direct:

Pylon related costs, Exploitation land (AC) to Support_Manage, maintain and repair buildings (excluding moves) (office space)

4.1.6.3.3 FTE Template completion

Teams of department "Infrastructure Management & Facilities" in charge of the Buildings management, are split between several Building Support objects, based on FTE's templates fulfilled by team's reponsible.

4.1.6.4 *The Destination of the BUI related costs :*

After usage of primary and/or secondary keys, the BUI related costs are allocated to following activities:

Activity	
Support_Telecom space_SDE	Network related
Support_Power Chain for telecom_SDE	Network related
Support_PROX_Pylons	Network related
Support_Manage cables	Network related
Support_Manage, maintain and repair buildings (excluding moves) (shop space)	Retail related
Support_Manage, maintain and repair fleet vehicles (utility vehicles)	Fleet related (Parking space)
Support_Manage, maintain and repair fleet vehicles (management vehicles)	Fleet related (Parking space)
Support_Manage, maintain and repair fleet vehicles (sales vehicles)	Fleet related (Parking space)
Support_Manage, maintain and repair buildings (excluding moves) (office space)	FTE related
Support_Provide catering services	FTE related
Support_IT	IT related
Support_Manage goods, warehouse & equivalents	Logistics related
Support_14001 TV and VoD	product related
Support_13001 Data Managed Services & Applications	product related
Support_30000 Subsidiaries & externals	product related

4.1.7 The power Key:

This key split the power related costs coming directly from power costs and from the buildings to different costs objects. It is based on the analytical split provided by the field:

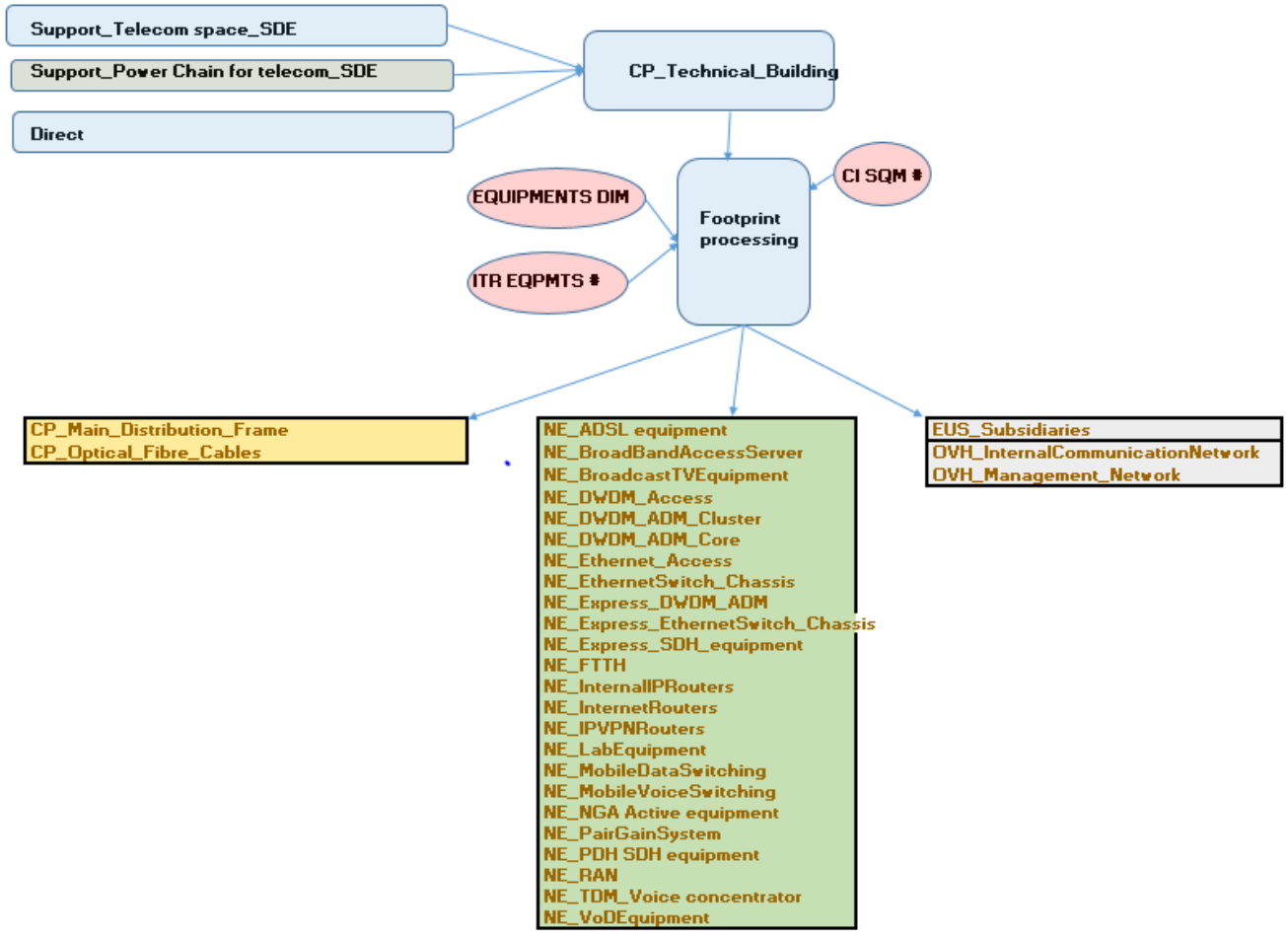
The total KWH consumption is known is split in 4 categories:

1. Mobile access (directly allocated to Support_PROX_Pylons)
2. Fixed access network (indirect allocation) to:
   Support_14001 TV and VoD
   Support_22243 Nat. IC - infra. Co-location /Co-mingling
   Support_30000 Subsidiaries & externals (for memory)
   Data centers, (split between SUPPORT_IT an Support_13001 Data Managed Services & Applications, based on real consumption)
   Support_Power Chain for telecom_SDE
   Support_Power Chain for ROP
3. Shops
4. Other (directly allocated to shops, or allocated to various element via generic key : offices,

4.1.8 Allocation of the Network building related costs : CP_Technical_Buildings

Based on the ConnectIMMO database (SQM), ITR (equipment), and some measurement and constants (footprint of equipments), the CP_Technical_Building is allocated via the running of an access macro.

4.1.8.1 *Allocation Flow :*



4.2 Allocation of the Retail costs of the Consumer and Enterprise Business units

4.2.1 Retail costs perimeter

As stated previously the Proximus organisational structure distinguishes between 5 distinct organisational pillars :

- Consumer Business Unit (CBU) has the responsibility over the residential customers
- Enterprise Business Unit (EBU) has the responsibility over the professional customers
- Customer Operations (CUO) has the responsibility to deliver services to customers such as provisioning, after sale and repair
- Technology (TEC) centralises Network and IT services
- Staff and support (S&S) groups all horizontal functions sustaining the Group activities

In this chapter, we deal with the Retail costs related to the commercial activities at the level of CBU and EBU.

Other Retail costs of the Cost model, that refer to services delivered to the final client, whether on client site or on remote, for installation or repair of the service, are dealt in the following chapter 4.4. related to Customer operations Business unit.

Starting from the Proximus organisational structure, we can identify 4 blocks in the Retail cost perimeter:

1. Retail FTE related costs
2. Retail Support costs
3. Retail costs that are not FTE related, nor Support costs, which do not have a direct causal relationship with products
4. Retail costs that are not FTE related, nor Support costs, which have a direct causal relationship with products.

Definitions and examples

1. Retail FTE related costs

Includes all direct FTE related costs of Business units CBU and EBU (GL 62, wages and other salary benefits) and indirect FTE related costs (some GL 61, as travel & representation costs, social benefits such as catering costs, etc.).

It also includes some costs that are not directly attributed to Retail Business units in the accounting books but do relate to Retail FTE activities. This concerns costs which are centrally booked and/or managed but which need to be flagged towards all Proximus FTE's. E.g.: costs re. Fleet, office building, train cards, bonus, training, gsm's in the context of the employee phone program …

2. Retail Support costs

Retail Support costs are non FTE related costs which are centrally booked and managed but relate to Retail activities. E.g. Billing, Shop space…

3. Retail costs that are not FTE related, nor Support costs, which do not have a direct causal relationship with products

This block includes costs such as IT developments not capitalized for applications specific to Retail departments, costs for legal claims, mandatory professional contributions, market surveys, etc.

4. Retail costs that are not FTE related, nor Support costs, which have a direct causal relationship with products

Costs that have an identifiable causal relationship to the products. E.g.: Cost of sales such as commissions paid on sales of identifiable products, cost of goods sold on equipment, dedicated outsourcing costs, etc.

4.2.2 Retail costs allocation principles

4.2.2.1 *Introduction of 2 cost type attributes*

Two cost type attributes are introduced in the cost model.

These attributes are "VAR_TYPE" and "PS_TYPE".

4.2.2.2 *Criteria for attribute dimension VAR_TYPE*

Dimension VAR_TYPE qualifies Retail costs based on their variability towards product volumes.

We distinguish between 2 var_types:

a. Variable (var): retail costs which can be considered sensitive to (important) volume changes of a single product or a range of products, whereby this (range of) product(s) is considered as the last increment in the product portfolio. Examples of costs which are considered variable based on these criteria: the sales departments, call center activities….
b. Fix (fix): retail costs are considered as fixed when they are likely to be inert to important volume variances. E.g.: Marketing spending. If the marketing campaigns can be directed to specific products, the amount of costs for these campaigns is not linked to volumes of the considered product.

4.2.2.3 *Criteria for attribute dimension PS_TYPE*

Dimension PS_TYPE qualifies retail costs based on whether they can be attributed directly, or through a specific non generic key and/or driver, towards products.

We distinguish between 2 PS types:

a. PRODUCT SPECIFIC (PS): these costs can be allocated directly to the products and thus are generated specifically for that related product. E.g. the costs of sale of a product.
b. NON PRODUCT SPECIFIC (NPS): Retail costs which do not have a clear causal relation with a specific product.

In addition to the attribute PS_TYPE, all retail costs of RETAIL module are flagged with an additional dimension "COST GROUP" enabling to identify the (span of) product(s) it covers.

COST GROUP specifies the product when the cost is product specific.
COST GROUP also gives the information on whether the costs are related to both Retail customers (CBU and EBU) or are only linked to one of them.

Used Cost Groups for the Retail costs in the Cost model are:

Non product specific
All Markets products
All Mass Market products
All Business Market products

4.2.3 Retail costs allocation flows

4.2.3.1 *General principles*

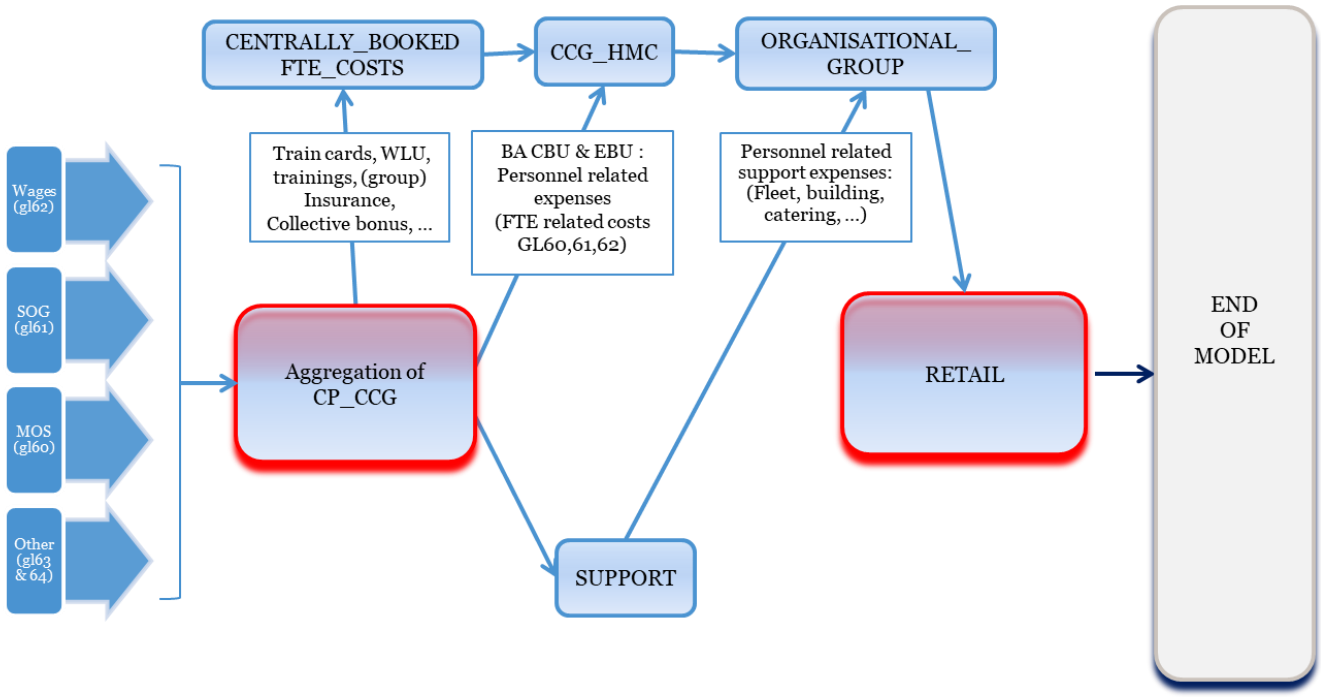
As described above, the 4 blocks of costs included in the Retail cost perimeter are all specified with 2 cost type attributes (VAR_TYPE; PS_TYPE) prior to be allocated to Markets.

However, the 4 blocks of costs:

- Do not follow all the same path of allocation.
- Are not all specified with VAR_TYPE and PS_TYPE within the module Retail.

The allocation flow followed by a Retail CCG_CP will depend on its block of costs (1->4).

4.2.3.2 *Retail FTE related costs (block 1)*



CP = costpool = a grouping of G/L accounts/costs which have similar characteristics and reside under the same nature of costs.
CCG = cost center grouping = grouping of cost centers with comparable characteristics.

Starting from the Cost basis, Retail FTE related costs are at first gathered into module CCG_HMC. CCG_HMC module is simultaneously feeded with module Centrally_Booked_FTE_costs (Train cards, WorkLifeUnit costs, etc.).

Retail FTE related costs gathered in CCG_HMC are afterwards loaded into module ORGANISATIONAL_GROUP. In ORGANISATIONAL_GROUP module, FTE related costs are

summed up with SUPPORT costs managed centrally (Fleet, building, catering, etc.) but that must be allocated towards Proximus FTE costs.

This is also at this stage of allocation flow that attributes VAR_TYPE and where CCG_CP are renamed as "Organisational groups" (terminology specific to FTE costs).

Organisational groups costs are at last directed to module Retail.

With regard to the definitions of attribute dimension VAR, Retail FTE related costs can only be either Fix (FIX), either Variable (VAR) costs.

For what matters FTE costs, this variability sensibility has been defined taking the following assumption:

Are Fix FTE costs, all the FTE costs that are needed to ensure the Proximus going concern independently of products volumes, id est, costs needed to maintain the Proximus minimum organizational structure.

Two types of FTE costs were identified as needed to maintain the Proximus minimum organizational structure:

- Staff costs such as IT officers supporting DB and IT tools used, reporting and analyst teams, research staff such as Products&Solutions engineers, Marketing staff costs;
- All the Proximus hierarchy structure (team responsible).

The classification of FTE costs for CBU and EBU between FIX and VAR costs, and whether product_specific or not (referred below as PS/NPS), is as follows:

CBU Organisational group	FIX/VAR	PS/NPS	Cost Group
Top management	Fix	NPS	All Mass Market products
Sales - Top management	Fix	NPS	All Mass Market products
Direct sales & e-sales	Var (*)	NPS	All Mass Market products
Support staff for Sales department (all channels)	Fix	NPS	All Mass Market products
Marketing	Fix	NPS	All Mass Market products
Call Center Activities	Var	NPS	All Mass Market products
idTV Content management	Fix	PS	idTV
Products & Solutions management	Fix	NPS	All Mass Market products
Strategy & Business development	Fix	NPS	All Mass Market products

(*) excluding Team responsible flagged as Fix costs.

EBU Organisational group	FIX/VAR	PS/NPS	Cost Group
Top management	Fix	NPS	All Business Market products
Strategy and business development	Fix	NPS	All Business Market products
Marketing	Fix	NPS	All Business Market products
COR (1), ME (2) and SE (3) Sales	Var (*)	NPS	All Business Market products
Professional Managed Services (4)	Var (*)	NPS	All Business Market products
Telco & ICT Solutions Specialists and Solutions sales	Mix Fix/Var	NPS	All Business Market products
IT Tools management	Fix	NPS	All Business Market products
Services & Pricing	Fix	NPS	All Business Market products

(*) excluding Team responsible flagged as Fix costs.
(1) COR, for CORPORATE, is the segment of large size enterprises (>= 50 employees).
(2) ME, for Medium Enterprises, is the segment for smaller size enterprises (from 10 to 50 employees).
(3) SE, for Small Enterprises, is the segment of very small enterprises (from 1 to 10 employees).
(4) Project management & Business integration

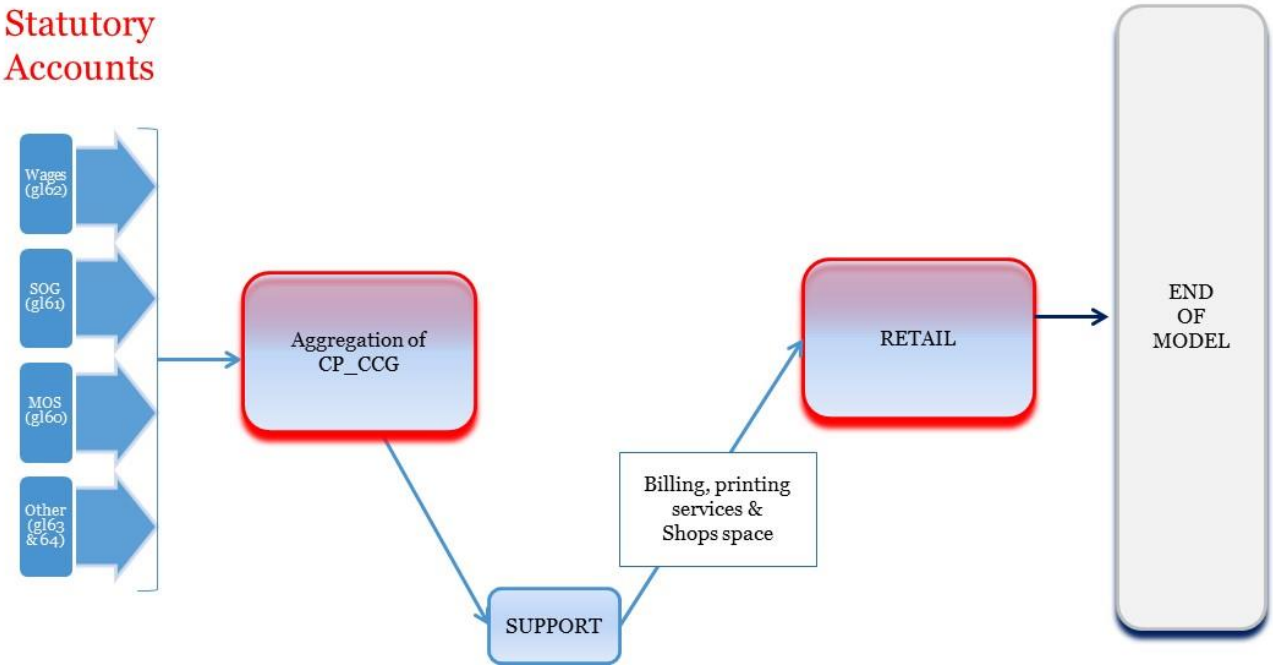
Some EBU organisational groups have a mix of Fix/Var costs per type of activity. The scission of these teams into FIX and VAR costs is based on #FTE, in accordance with Proximus functional organization and Retail principles for determining if a cost is FIX or VAR.

E.g.:

Teams in charge for relations with indirect sales channels are made of Direct sales (VAR costs) and of people in charge of Sales channels optimization, strategy and budgeting (FIX costs).

Teams of Solutions Specialists and Solutions Sales are made of Direct sales (VAR costs) and Products&Solutions managers in charge of product catalogue and architecture (FIX costs).

4.2.3.3 ***Retail Support costs (block 2)***



Module SUPPORT identifies and collects the costs of some support objects which a.o. are retail related.

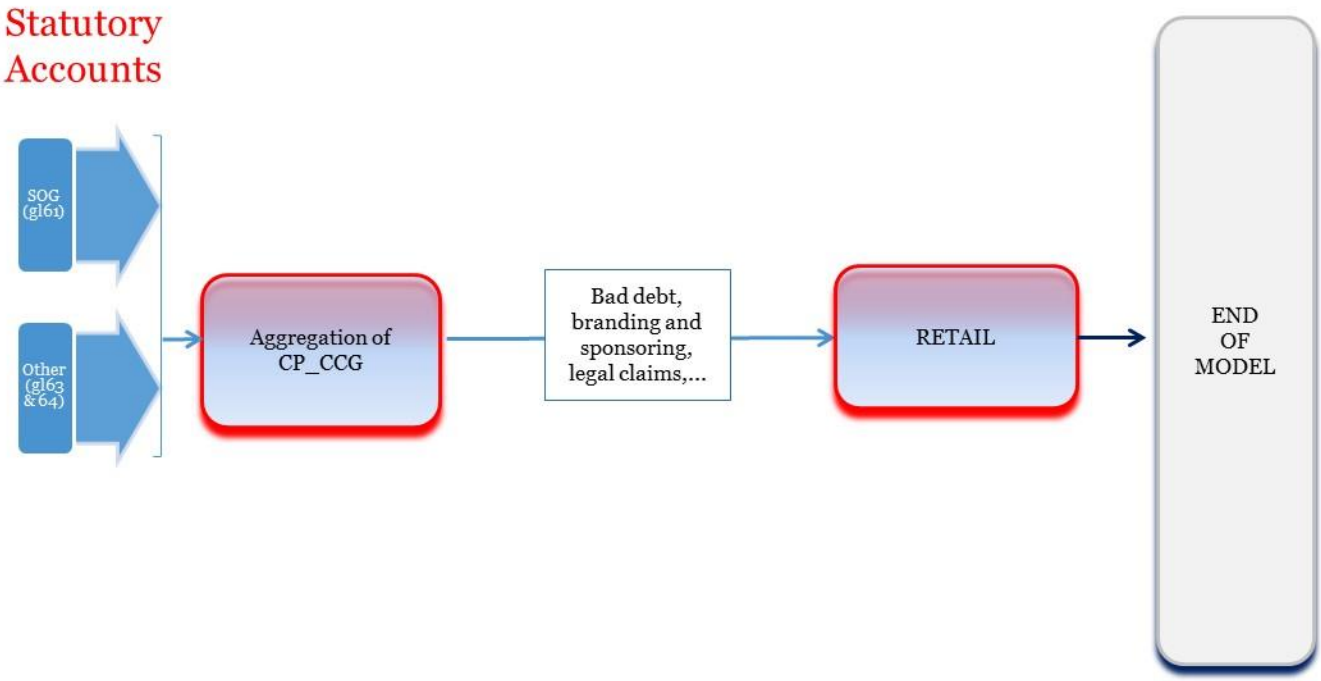
The retail related support objects primarily concern billing costs (invoice printing, stuffing and postage) and costs for shop space. These costs are primarily gathered in module SUPPORT.

Costs for shop space are considered fix. The costs of creation and maintain a shop is not linked to the volumes of products the shop offers, but well to other criteria such as geographical localisation, local withholding tax regulation, points of sales optimization, etc. The CBU shops sell all types of products. These costs are therefore assigned as non_product_specific.

Since 2019, Proximus shops are fully occupied by Proximus Direct Sales. Costs for shop space are accordingly allocated towards those teams, via module RETAIL.

Billing costs are fix, non product specific costs.

4.2.3.4 ***Retail costs which do not have a causal relationship with products (block 3)***

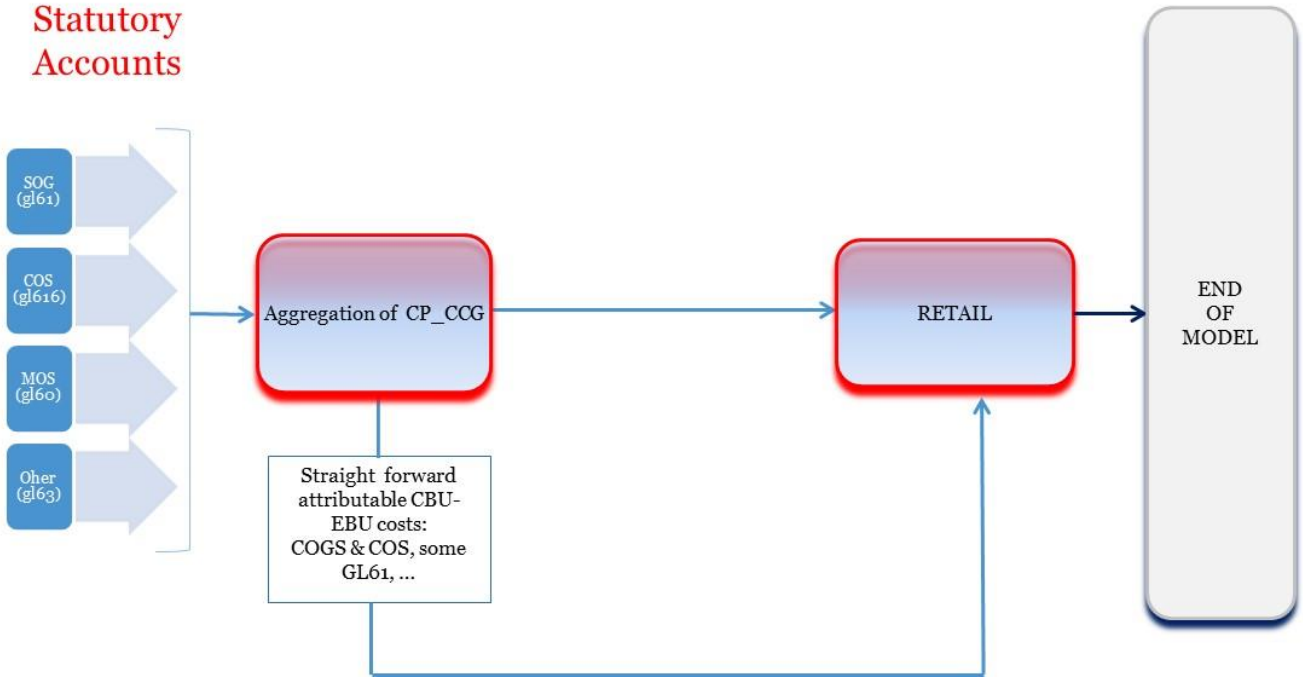


Per definition these costs are fix and non product sepcific (e.g. IT developments not capitalized for the internal needs of a Retail department, bad debt, legal claims, etc.).

Bad debt is categorized as fix costs. Bad debt does not have a link to volumes of products but well to criteria such as macro-economic and competitive environment, regulatory framework (telecom laws), quality rating of the portfolio of clients, rather than to volumes of products.

Follow up and provision for bad debt is not done per products, but well per invoices and clients. Bad debt tends to increase with turnover growth.

4.2.3.5 ***Retail costs which have a causal relationship with products (block 4)***



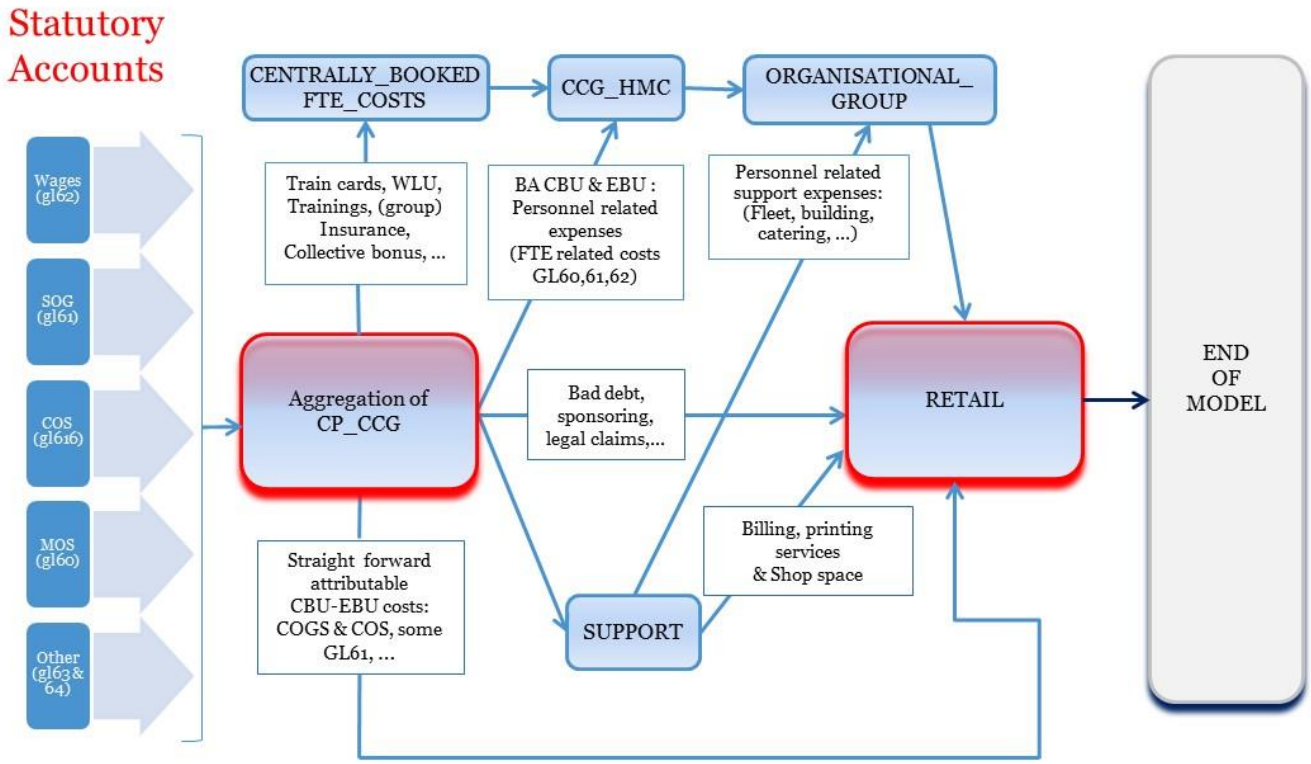
Are included in this block of Retail costs, all the costs that are not FTE related costs, nor Support costs, that have a causal relationship with products.

Examples of costs of this category are Cost of goods sold, costs of sales (e.g: commissions indirect sales channels, interconnection fees), campaigns marketing directed on a product, and sales actions oriented on a dedicated products such as Outbound call sales actions..

Per definition, Retail costs of Block 4 have a causal link to products. They can be VAR costs, volumes driven or not (e.g. idTV content FIX costs).

Cost of goods sold and Cost of sales have a direct link to product they relate. Therefore, they are allocated directly to the destination object in the Retail module.

Retail allocation flows – all costs blocks (1->4), can be illustrated as follows:



4.3 Allocation of the CWS (Customer Wholesale division) costs

The allocation flow and principles are identical to the retail costs allocation flow.

4.3.1 Wholesale costs perimeter

All Wholesale activities are situated at the level of Business unit CWS (Customer Wholesale).

Starting from the Proximus organisational structure, we can identify 4 blocks in the Wholesale cost perimeter:

1. Wholesale FTE costs
2. Wholesale Support costs
3. Wholesale costs that are not FTE related, nor Support costs, which do not have a direct causal relationship with products
4. Wholesale costs that are not FTE related, nor Support costs, which have a direct causal relationship with products.

Definitions and examples

1. Wholesale FTE costs

Includes all direct FTE related costs of Business unit Customer Wholesale (GL 62, wages and other salary benefits) and indirect FTE related costs (some GL 61, as travel & representation costs, social benefits such as catering costs, etc.).

Includes also a number of costs that are not directly attributed to Wholesale Business unit in the accounting books but do relate to Wholesale FTE activities. This concerns costs which are centrally booked and/or managed but which need to be flagged towards all Proximus personnel/FTE's (and thus also towards these residing under CWS). E.g.: costs re. Fleet, office building, traincards, bonus, training, gsm's in the context of the employee phone program…

2. Wholesale Support costs

Wholesale Support costs are non FTE related costs which are centrally booked and managed but relate to Wholesale activities. E.g.: Billing.

3. Wholesale costs that are not FTE related, nor Support costs, which do not have a direct causal relationship with products

This block includes costs such as IT developments not capitalized for applications specific to Wholesale departments, costs for legal claims, etc.

4. Wholesale costs that are not FTE related, nor Support costs, which have a direct causal relationship with products

Costs that have an identifiable causal relationship to the products. E.g.: Cost of sales and costs of goods sold, interconnection fee, etc;

4.3.2 Wholesale costs allocation principles

4.3.2.1 *Introduction of 2 cost type attributes*

Two cost type attributes are introduced in the cost model.

These attributes are "VAR_TYPE" and "PS_TYPE" and they constitute a unique combination for each wholesale CP-CCG.

These attribute-qualifications are applied on all the wholesale CP-CCG combinations, but at different levels of modules, depending on the type of costs: FTE related, Support, etc., in accordance with the Wholesale allocation process as described below.

4.3.2.2 *Criteria for attribute dimension VAR_TYPE*

Dimension VAR_TYPE qualifies wholesale costs based on their variability towards product volumes.

We distinguish between 2 var_types:

- Variable (var)
- Fix (fix)

As they have stricto sensu the same definitions than for Retail allocation, we refer to the definitions of these 2 var_types as described in chapter 4.2.2.2.

4.3.2.3 *Criteria for attribute dimension PS_TYPE*

Dimension PS_TYPE qualifies wholesale costs based on whether they are specifically generated and/or can be attributed directly, or through a specific non generic driver, towards specific product(s).

We distinguish between 2 PS_types :

- PRODUCT_SPECIFIC (PS)
- NON_PRODUCT_SPECIFIC (NPS)

As they have stricto sensu the same definitions than for Retail allocation, we refer to the definitions of these 2 ps_types as described in chapter 4.2.2.3.

In addition to the attribute PS_TYPE, all wholesale costs are flagged with an additional dimension "COST GROUP" enabling to identify the (span of) product(s) it covers.

E.g.: Roaming costs will be (Mobile) product specific, while Product management FTE costs will be non_product_specific.

4.3.3 Wholesale costs allocation flows

4.3.3.1 *General principles*

As described above, the 4 blocks of costs included in Wholesale cost perimeter are all specified with 2 cost type attributes (VAR TYPE; PS TYPE). Like the Retail allocation flow, the 4 blocks of costs do not follow all the same path of allocation. The allocation flow followed by a Wholesale CCG_CP will depend on its block of costs (1->4).

4.3.3.2 *Wholesale FTE related costs (block 1)*

The allocation flow of Wholesale FTE related costs is the same than the Retail one. We therefore refer to chapter 4.2.3.2. for presentation of the several modules whereby FTE related costs are centralized/allocated. As a reminder, the list of modules that deal with FTE related costs is as follows:

- Cost basis (GL62, as well as some GL60&61),
- CCG_HMC or SUPPORT ([1]),
- ORGANISATIONAL_GROUP,
- CUSTOMER_WHOLESALE.

With regard to the definitions of Attribute dimension VAR, Wholesale FTE related costs can only be either Fix (FIX), or Variable (VAR) costs.

Criteria to classify FTE related costs into FIX vs. VAR costs were similarly defined as for the Retail allocation flow, id est: are considered as FIX costs, all the FTE costs needed to maintain the Proximus minimum organisational structure, independently of products volumes. These ones include staff costs such as IT officers, reporting & analysts teams, research staff (e.g.: products & solutions managers), as well as the Proximus hierarchy structure (team responsibles).

Organizational groups dedicated to a specific product are categorized as product_specific (PS). We identified only one organizational group in the Wholesale organisation structure that is product specific, id est, the team involved exclusively in Roaming agreements.

Organizational groups covering a span of products are categorized as non_product_specific.

E.g.:

CWS Sales department is an organisational group defined as Var, non product specific. CWS sales FTE are responsible for regulated and non regulated products.

CWS Call center activities include 3 main divisions:

- *Operational team* in contact with external clients. This division gathers the Front office and Back office in charge of the sales orders intake, answers to questions of clients, and support to the CWS Sales department in period of high business activity
- *Billing and credit collection team*
- *Reporting, IT tools management and process optimization team*.

[1] FTE related support costs.

Billing and credit collection team is qualified as "fix, non product specific"cost. Billing activity is a cost depending on volumes of clients, not on volumes of products. Billing costs is also a non_product_specific cost, as vast majority of CWS clients have more than one product by Proximus.

Reporting, IT tools management and process optimization team, as Support staff team, is identified as a "fix, non product specific" organisational group cost.

Front office and Back office costs are categorized as "variable, non product specific", considering the variability of these costs with volumes of products sold, and taking into account that CWS Call center activities handle all CWS products, regulated as well as non-regulated products.

4.3.3.3 *Wholesale support costs (block 2)*

The wholesale support costs are identified firstly in Module "Support". Wholesale support costs specifically concern "CWS_Billing" (invoice printing, stuffing and postage).

We qualify CWS_Billing as a fix non_product_specific cost. Cost Group of CWS_Billing is "All Carrier Wholesale products", since the CWS_Billing support costs include all the products of CWS, whether regulated or not.

As mentioned in chapter 4.3.3.2.3 related to the CWS CCA staff team in charge of Billing and credit collection follow-up, to the contrary of the Retail billing costs, the case that billing costs can be linked to some unique product is not met, since the vast majority of the CWS clients have more than one product billable. The absence or suppression of one product will not change the need for invoicing the client.

4.3.3.4 *Wholesale costs which do not have a causal relationship with products (block 3)*

Block 3 category of costs will include, for example; IT developments not capitalized for the internal needs of Sales departments, bad debt, legal claims,….

Per definition, these costs are non_product_specific.

4.3.3.5 *Wholesale costs which have a causal relationship with products (block 4)*

Are included in this block of Wholesale costs, all the costs that are not FTE related costs, nor Support costs, that have a causal relationship with products.

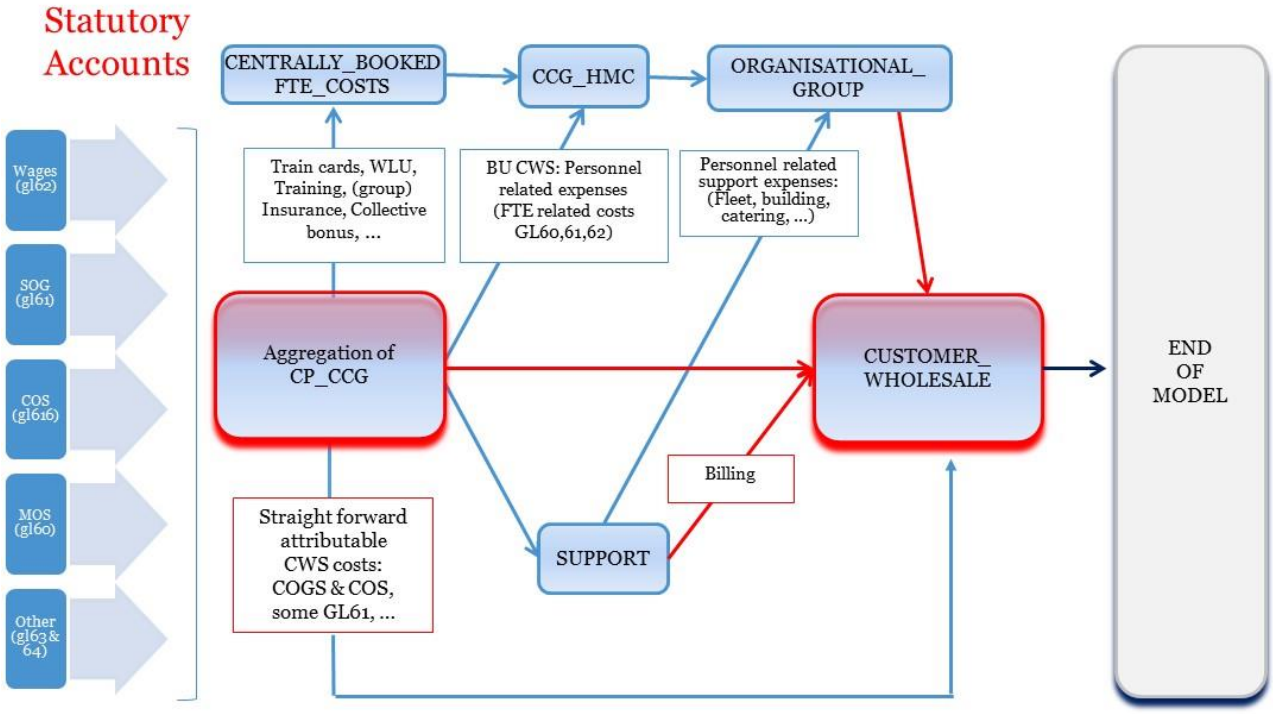
Per definition, these costs have a causal link to products. The causal link to products can be volumes driven (VAR cost) or not (FIX cost).

The main costs of this category are Cost of goods sold, cost of sales (e.g: interconnection fees), consultancy and outsourcing costs dedicated to specific products.

Cost of goods sold and Cost of sales, have a direct link to volumes of product they relate (VAR cost).

Consultancy and outsourcing costs can relate to a specific product, but do not necessarily vary according to volumes of the product. E.g.: Fees to Clearing Offices for roaming (FIX cost).

Wholesale allocation flows of all types of Wholesale costs is presented as follows:



4.4 Allocation of the CUO (Customer operations) retail & non retail costs

4.4.1 Customer operations costs perimeter

Customer operations is a Business unit created in 2014. The division gathers activities previously done inside these Business Units: Consumer Business Unit (CBU), Enterprise Business Unit (EBU), Technology (TEC) and Staff and Support (S&S).

Objective of the creation of the Business unit Customer operations (CUO) was to join in the same Business Unit all the Proximus activities to the service of the customer.

CUO includes both retail & non retail costs. Retail costs concern commercial retail (e.g. commercial call centers) and technical retail activities (e.g. technical call centers). Non retail costs concern the network share of the activities (e.g. cabling network - this is explained in the life cycle chapter).

To ensure consistency with allocations of previous years, we allocate costs of CUO in the same way as done previously inside the separate Business Units CBU, EBU, TEC and S&S, for the CCG concerned.

Besides, a number of costs that are not directly attributed to CUO in the accounting books, however do relate to CUO activities. It concerns costs which are centrally booked and/or managed but which need to be flagged towards all Proximus FTE's.

E.g.: costs re. Fleet, office building, train cards, bonus, training, gsm's in the context of the employee phone program …

These costs are added up with the directly attributable CUO FTE related costs and allocated to CUO CCG towards the organisational groups.

We refer to chapter 4.2.3.2 Retail CBU & EBU FTE related costs, where the allocation flow is described for FTE related costs, as it is applicable to CUO FTE related costs.

For what matters human power costs, the CUO module is primarily sourced from the following modules:

1. **Organisational Group**
   This concerns the CUO FTE related costs.

2. **CP1**
   This mainly concerns the outsourcing costs for the field and remote technical activities (provisioning and repair) and the outsourcing costs for retail activities (front office and after sales).

4.4.2 Customer operations costs allocation principles

4.4.2.1 *Introduction of 2 cost type attributes*

Two cost type attributes are introduced in the cost model.

These attributes are "VAR_TYPE" and "PS_TYPE" and they constitute a unique combination for each Customer operations CP-CCG.

4.4.2.2 *Criteria for attribute dimension VAR_TYPE*

Dimension VAR_TYPE qualifies customer operations costs based on their variability towards product volumes.

We distinguish between 2 var_types:

- Variable (var)
- Fix (fix)

As they have the same definitions than for Retail CBU & EBU allocation, we refer to the definitions of these 2 var_types as described in chapter 4.2.3.2. Retail CBU & EBU FTE related costs.

4.4.2.3 *Criteria for attribute dimension PS_TYPE*

Dimension PS_TYPE qualifies CUO costs based on whether they are specifically generated and/or can be attributed directly, or through a specific non generic driver, towards specific product.

We distinguish between 2 var_types:

- PRODUCT_SPECIFIC
- NON_PRODUCT_SPECIFIC

Considering the activities of CUO Business unit (activities of services to the customer), most of the costs are NON_PRODUCT_SPECIFIC.

4.4.3 Customer operations costs allocation flows

4.4.3.1 *Allocation of Organisational Group costs*

The classification of FTE costs for CUO between FIX and VAR costs, and whether product specific or not, is as follows:

CUO Organisational group	FIX/VAR	PS/NPS	Cost Group
Top management	Fix	NPS	Not Specified (means, All Proximus products)
Support services to the business unit			
Strategic planning	Var (*)	NPS	Not Specified
Operations: IT Tools, reporting & process	Var (*)	NPS	Not Specified
Field technical services for the customer			
After sales technical - provisioning	Var (*)	NPS	Not Specified
After sales technical - repair	Var (*)	NPS	Not Specified
Remote services for the customer			
Billing & Credit collection	Var (*)	NPS	All Markets products
First line & Second line, technical & commercial	Var (*)	NPS	All Mass Market products
" "	Var (*)	NPS	All Small and Medium Entreprise Market products
" "	Var (*)	NPS	All Corporate Entreprise Market products
" "	Var (*)	NPS	All Carrier Wholesale products

(*) excluding Team responsible flagged as Fix costs.

Support services to the business unit

The FTE related costs of organizational group providing Support to the business unit CUO are identified. These costs are treated as a markup on the division's other operating costs (technical and commercial services to the customer).

Technical services to the customer

The FTE related costs of organizational groups are mostly allocated to forward destination modules such as Network elements or CP2, based on time or efforts spent for these respective elements, as registered in various reporting systems depending upon the department (e. g. Dispatch units for Field operations).

Commercial services to the customer

When the costs relate to a specific business unit, Consumer business unit or Enterprise business unit, or even to a specific segment inside Enterprise business unit (Corporate, Medium or Small enterprise), the costs are labelled for the segment they belong to, with the Cost group attribute.

Billing and Collecting invoices activities covers both divisions CBU and EBU and have as cost group *All Markets products*.

4.4.3.2 *Allocation of Outsourcing costs*

Outsourcing costs include:

- costs gathered in module CP1 for field technical teams
- costs gathered in module CP1 for administrative and technical remote services teams (front office and after sales).

When activity is similar, outsourcing costs are allocated with the same drivers (based on time/efforts) than used for the Organisational groups. When activity is specific, dedicated allocation keys are applied.

4.5 Costs in the Life cycle of products

4.5.1 Cost perimeter

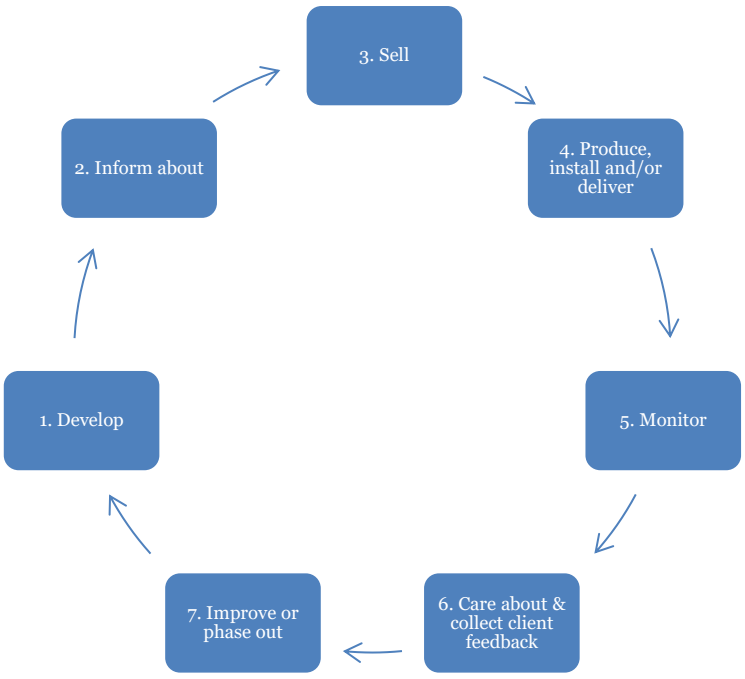
The costs involved in the life cycle of products are sourced primarily from modules AC, OTHER_MOS, OTHER_SOG, CUSTOMER_RETAIL and CUSTOMER_OPERATIONS.

Documentation below provides information on all the activities involved in the Life_Cycle of products. In the Cost model, those activities are found in CUSTOMER_RETAIL and CUSTOMER_OPERATIONS allocation modules.

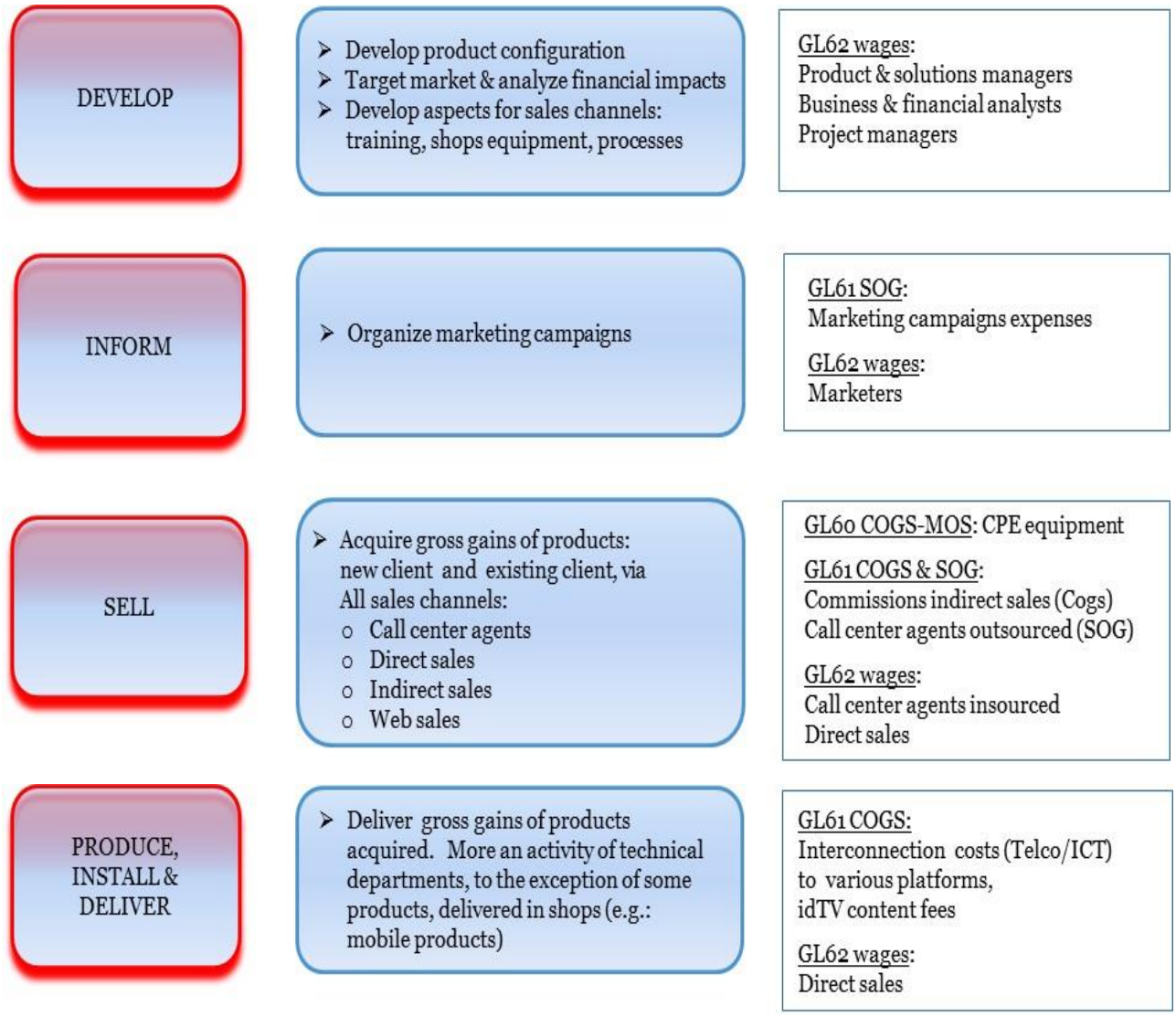
In the 2019 model, we introduce for the first time separate fiber-related technical activities whenever the fiber costs are identifiable. In the past, CUO only dealt with copper. But CUO now also deals with fiber in line with the announced gigabit network strategy of Proximus translating into a.o. the deployment of a fiber network. So please do read copper & fiber whenever you see copper in the tables below.

Also note the ISO team (remote professional repair activity) has been transferred from EBU to CUO since 2019. So please do read CUO whenever you see EBU in the table below.

The life cycle of a product includes the following stages:



Following costs were identified in the life cycle of a product/service:



DELIVER : Remote activation

- All products (mass or professional, fixed or mobile) must be remotely activated in the network.
- The remote activation may be sufficient to deliver the product in specific cases but in many cases, a field travel is necessary to complete the product delivery.
- Ideally, the remote activations would all be automatically executed further to an order from the customer in the IT systems but in reality, this process still requires manual interventions.
- The complexity of professional remote activations naturally requires a specific and important team (CNN). The activation activity in the life cycle refers to CNN.
- The PCD (Provisioning Coordination Desk) mass remote activation activity is consolidated with the dispatching activity in the DCO included in the field installation life cycle activity.

GL61 SOG:
PCD (Provisioning Coordination Desk) in the DCO (Dispatch & Coordination Center) (CUO/ASA/DCO), CNN (Professional Connectivity)

GL62 wages:
PCD (Provisioning Coordination Desk) in the DCO (Dispatch & Coordination Center) (CUO/ASA/DCO), CNN (Professional Connectivity)

DELIVER : Field installation

- A remote activation of the product in the network may not be sufficient, especially in the case of fixed products.
- In that case, a technician (insourced or outsourced) must travel to the field in order to complete the necessary actions :
  - in the network up to the NTP (Network Termination Point in the customer house) (even DIY installations by the customer may require a field action in the network) and/or
  - outside of the network e.g. for mass products, the modem and/or TV decoder (FULL installation).
- The field installation activity in the life cycle relates to the work done by the technicians outside of the network.
- It also includes the remote activation (for mass products) as well as the dispatching activities from the DCO.

GL60 MOS-MAT:
Equipments like modems and/or TV decoders, located in "Terminals" life cycle various categories

GL61 SOG:
Copper
DCO (Dispatch & Coordination Center), CUO CFF MP (Customer Operations Customer Field Force Mass Professional) fulfilment

GL62 wages :
Copper
DCO (Dispatch & Coordination Center), CUO CFF MP (Customer Operations Customer Field Force Mass Professional) fulfilment

MONITOR: Billing & Collecting Revenues	➢ Produce and send bills ➢ Manage bad debt: follow ageing balance, send reminders & bailiffs costs	GL61 SOG: Printing & postage costs Bailiffs costs GL62 w ages: Call center agents insourced (dedicated team Billing&Credit risk) GL 63&64 Other: Bad debt provision & write-off
MONITOR: Changes on products sold	➢ Adapt product configuration, in accordance with requirements of the client: swap, downgrade/upgrade of a pricing plan, additional option, churn, configure multiple products in a pack (pack configuration)	GL61 SOG: Call center agents outsourced GL62 wages: Direct sales, Call center agents insourced
CARE: Handling clients complaints	➢ Handle billing complaints ➢ Process request for changes of personal data (clients moves, etc.)	GL61 SOG: Call center agents outsourced GL62 wages: Call center agents insourced, Direct sales
CARE: Remote repair	➢ When a customer has a technical issue with a product/service, he/she can contact the appropriate call center (mass or professional). Whilst the customer is waiting on e.g. the CHC line, the DARE IT system already processes the customer data in order to test potential issue drivers. ➢ The first line call center agent may be able to fix the issue of the customer … or not. ➢ In the later case, the call center agent will call upon the second line agents who themselves will call upon a third line outside of CHC or ISO if they can 't fix the issue. ➢ The remote repair activity in the life cycle relates to the CUO CHC (Customer Operations, Customer Help Center, for mass products) and the EBU OPS ISO (Operations,ICT Service Operations - Information & Communication Technology - for professional products)	GL61 SOG: CUO CHC (Customer Operations, Customer Help Center) for mass products) and EBU OPS ISO (Operations,ICT Service Operations - Information & Communication Technology) for professional products GL62 w ages: CUO CHC (Customer Operations, Customer Help Center for mass products) and EBU OPS ISO (Operations,ICT Service Operations - Information & Communication Technology) for professional products

CARE: Field repair	➢ A remote repair of the customer technical issue for one or several products may be impossible, be it by the first, second or third line. ➢ In that case, a technician (insourced or outsourced) must travel to the field in order to complete the necessary actions : ➢ in the network e.g. the ROP, the LEX, the NTP (Network Terminating Point, in the customer house) and/or ➢ outside of the network in the customer office for professional products or house for mass products (e.g. the modem, the TV decoder). ➢ The field repair activity in the life cycle relates to the work done by the technicians outside of the network. ➢ It also includes the dispatching activities from the DCO (Dispatch & Cordination Center).	GL61 SOG: *Copper* DCO (Dispatch & Coordination Center) (CUO/CFF/DCO), CUO CFF MP (Customer Operations Customer Field Force Mass Professional) repair GL62 wages : *Copper* DCO (Dispatch & Coordination Center) (CUO/CFF/DCO), CUO CFF MP (Customer Operations Customer Field Force Mass Professional) repair
CARE: Retention & Loyalties programs	➢ Inform about loyalties actions & facilities, ➢ Implement retention actions	GL60 MOS-MAT: Sales gifts and loyalties advantages GL61 SOG: Call center agents outsourced GL62 w ages: Call center agents insourced
IMPROVE or PHASE OUT	➢ Design product new configuration/phase out ➢ Target market & analyze financial impacts ➢ Develop aspects for sales channels: training, shops equipment, processes	GL62 wages: Product & solutions managers Business & financial analysts Project managers

4.5.2 Modern equivalent opex (MEO)

The 2014 Cost model introduced the concept of modern equivalent opex: a company will perform an activity with its own personnel, if the use of its own personnel is equivalent in costs to another business model such as partnership, outsourcing, interim workers, commissioning, etc.

The MEO introduces a new way to determine VAR costs. Objective of the MEO is to only keep as VAR costs the incremental, effective costs needed to perform an activity, by comparing unit cost of FTE Proximus with unit cost of Outsourcing.

MEO concept application requires some basics:

- comparison basis is reliable: activities insourced and outsourced must be of the same nature,
- same drivers must be available to compare both costs.

MEO application to Commercial activities:

Proximus outsources part of its commercial activities: direct sales, front office and after sales. These activities are also performed with Proximus FTE, as described above.

Direct sales and After Sales team cannot appropriately be compared to their outsourced equivalent teams: performance remuneration differs, tasks differ quite also.
E.g.: After sales outsourcers are used for specific tasks, often easier than the ones assigned to Proximus FTE, more trained and skilled about Proximus products and IT Tools.

The only sales channel where we can apply the MEO valuably is the Front office.

Front officers:

- use the same Proximus IT tools (Interactive Virtual Response), where volumes and minutes of calls are registered.
- perform the same tasks: receive phone calls of clients and promote Proximus products & services.

Unit cost/minute of the Front office Outsourced is applied to volumes of minutes of the Front office Insourced, to determine the MEO Front office VAR costs, other part of cost is considered as a Fix cost.

MEO application to Technical activities:

CUO outsources part of its VAR Retail activities: remote repair (by the CHC/Customer Help Center technical call center), field installation and field repair. These activities are also performed with Proximus insourced FTE, as described above.

The CUO CHC technical center second line may not come into consideration for MEO: tasks differ from the first line ones and cannot be measured the same way. However, tasks of outsourcers for both field installation and field repair do not differ and can be measured the same way, as well as tasks of outsourcers for the CUO CHC technical center first line.

Until 2022, MEO had been valuably applied to the CHC technical call center first line, as well as the field installation & the field repair.

Front officers (the first line of the CHC technical call center for remote repair):

- use the same Proximus IT tools & volumes and minutes of calls are registered the same way.
- perform the same tasks: receive phone calls of clients and try to remotely repair the products.

Technicians (for both field installation and repair) :

- use the same Proximus IT tools & volumes and DU are registered the same way.
- perform the same tasks: install and repair products/services of customers on the field.

In 2022, the new Agile organization gathered the Proximus insourced FTE from CHC technical call center first line, with the Proximus insourced FTE from administrative call center 2nd line. This merge makes part of the Agile vision of the company and has had for aim to support better the clients, enabling him a 360° interaction with Proximus.

This merge of technical and commercial remote services had however for practical consequence that we haven't been able anymore to identify the costs of the CHC technical call center first line. We therefore stopped to determine the MEO CHC technical call center VAR costs.

We only kept determining the MEO Field Technicians VAR costs.

Unit cost/DU (measure of time) of the Outsourced Technicians is applied to volumes of DU of the Insourced Technicians, to determine the MEO Field Technicians VAR costs, other part of cost is considered as a Fix cost.

5 TEC OPEX (network&IT) stream

5.1 Allocation of TEC OPEX costs going through the "TECHNOLOGY" module

5.1.1 Determination of the TEC cost perimeter

As stated previously the Proximus organisational structure distinguishes between 5 distinct organisational pillars called Business units :

- Consumer Business Unit (CBU) has the responsibility over the residential customers
- Enterprise Business Unit (EBU) has the responsibility over the professional customers
- Customer Operations (CUO) has the responsibility to deliver (commercial and technical) services to customers such as provisioning, after sale and repair
- Technology (TEC) module in the Cost model centralises Network and IT services. In the organization of Proximus SA, TEC activities are done in 2 Business Units created in July 2020: Network Business Unit and Digital Transformation & IT Business Unit.
- Staff and support (S&S) groups all horizontal functions sustaining the Group activities.

Commercial retail activities are situated at the level of Business unit CBU (consumer business unit) for the residential and at the level of Business unit EBU (enterprise business unit) for professional customers.

Technical retail activities are a priori situated at the level of Business unit CUO (Customer Operations). Yet CUO also entails commercial retail activities & non retail costs (the network share of the technical activities). Network & IT activities are situated at the level of Business unit TEC, as well as the carrier & wholesale activities (CWS).

The Proximus financial and accounting structure clearly registers (directly attributable) TEC costs on cost centers 50xxxx, separately from the wholesale costs booked on cost centers 40xxxx.

However, a number of costs are not directly attributed to TEC in the accounting books but do relate to TEC activities.

It concerns :

1. FTE related costs
   Support and centrally booked costs which need to be ventilated towards all Proximus personnel/FTE's (and thus also towards these residing under TEC).

   E.g. Proximus University, Fleet, office building, train cards, bonus, training, gsm's in the context of the employee phone program.
2. Non FTE related costs

Costs which are centrally booked and managed but relate to TEC activities such as space and power consumption.

The costs under point 1. above are added up with the directly attributable FTE related costs (essentially all payroll costs and costs categorized with Cost type 'personnel-related' in the cost base, in lesser extent a limited number of costs categorized as 'non personnel-related', i.e. primarily training costs, printing costs and cost for office equipment) and allocated towards the organisational groups (as a general rule, the organisational group corresponds with the cost center group - except for teams like hybrid network & IT CCG's (SPC NSC)).

The TECHNOLOGY module costs are primarily sourced from the following modules :

1. Organisational_Group
   This concerns the costs of "50xxx" organisational groups not belonging to CUO.

2. TEC_SOG
   This primarily concerns costs for consultancy, rent/buy equipment.

5.1.2 TEC cost allocation

5.1.2.1 *Introduction of 2 cost type attributes*

Two cost type attributes are introduced in the cost model.

These attributes are "VAR_TYPE" and "PS_TYPE".

For TEC, these attribute qualifications are not defined at the level of the cost base for all CP-CCG combinations but only for the FTE related costs at the level of the organisational groups (module "organisational_group").

5.1.2.2 *Criteria for Attribute dimension VAR_TYPE*

Dimension VAR_TYPE only qualifies TEC FTE-related costs in the TEC module, unlike in the commercial retail module.

Variability refers to the service volume produced by the company in the long-run. This variability has 2 dimensions : volume within a product or diversity of products. The considered increment is the whole product. E.g. PSTN : what if we stop PSTN, which costs do we avoid? This is very hard to reach, especially in a top-down model.

Therefore, we prefer to opt for a simple approach that is only an approximation of the minimum fixed costs, by only considering as fixed FTE-related costs the so-called overhead teams and the minimum organizational structure, represented by the persons attributed with a "team responsibility" or in an MST cost center, as officially reported in the SAP accounting system.

We distinguish between 2 var_types only (unlike Retail CBU & EBU, with 4 var types):

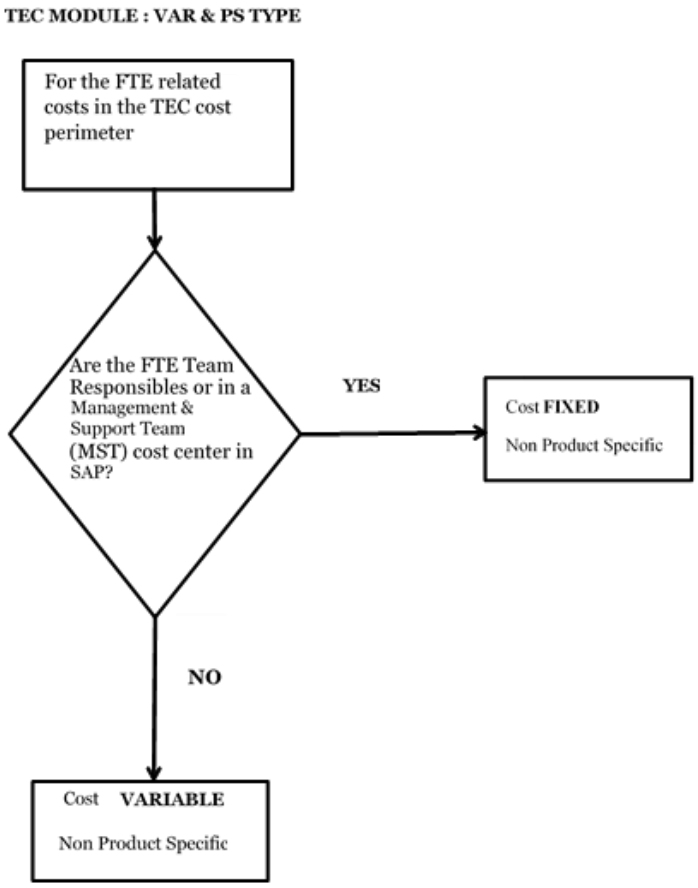
1. Fix (fix) : TEC FTE-related costs are considered as fixed mainly when they are related to the minimum organizational structure (represented by the team responsibles and the Management & support teams) should there be a change in the long run.
2. Variable (var) : TEC costs which are not considered as fixed according to the definition hereabove (hence overestimated).

5.1.2.3 *Criteria for attribute dimension PS_TYPE*

Dimension PS_TYPE qualifies TEC costs based on whether they are specifically generated and/or can be attributed directly or through a specific non generic and/or non general driver towards the specific products.

We only have one category in the TEC module :

a. NON_PRODUCT_SPECIFIC : TEC costs which do not have a clear (causal) relation with specific products.



5.1.3 TEC allocation process

5.1.3.1 *Allocation of "Organisational_Group" costs*

For TEC, the organisational groups a priori correspond with the cost center groupings as introduced at the level of the cost base.

The criteria as set above (5.1.2.2.) regarding variability are currently translated towards organisational groups based on this decision table :

	Criteria	Justification
fix FTE	Assigned as Team responsible in SAP	Assumption of Proximus as ongoing concern on the long run, independent of Product mix : maintain the same organisational structure (reflected through team respo's)
	Assigned to an MSTcost center in SAP	MST cost centers are referring to Management & Support teams

Organisational groups dedicated to a specific product are categorized as product_specific.

Organisational groups covering a span of products are categorized as non_product_specific.

In TEC, all organisational groups have been defined as "non_product_specific".

Except for the NEO (Network Engineering & Operations) department, where as of the 2018 model this parameter is used to give the type of network activity the team relates to (e.g. fixnetwork, radio& access network…).

The allocation for fix & var TEC organizational groups is a priori the same.

The FTE related costs of organizational groups are allocated towards markets, network, activities or IT elements based on time or efforts spent for these respective elements, as registered in various reporting systems depending upon the department (Rapid for SPC…).

5.1.3.1.1 Technology (TEC) Organisational group allocation

5.1.3.1.1.1 TEC network & IT OPEX organizational group allocation

The network & IT teams of TEC are thus split into fix and var on the basis of objective criteria found in SAP but allocated the same way (var being a copy of fix) to the following elements :

- AC2
- BUSINESS_OVERHEAD
- CP2
- IT_SW_HW
- IT_STORAGE_DB
- NE

In the TEC module, the organisational groups do not only encompass the costs of GL 62 wages but also FTE-related costs from GL60 MOS or GL 61 SOG, whilst outsourced personnel costs (for 2 CP mainly : 61361 & 61362) have been consolidated into a new module (EXTERNALS).

The driver is based on time/efforts when it makes sense.

The allocation of the “operational” teams is done directly through the driver whilst the allocation of the “non operational” teams is done through generic keys taking into account the scope of the “non operational” team (driver is the remuneration cost allocation of all the teams in the scope of the “non operational” team).

The allocation of the “fix” part of the “operational” teams is done through generic keys or via a simple copy of the remuneration cost allocation of the “var” part of the same operational team.

5.1.3.2 *Allocation of TEC support costs*

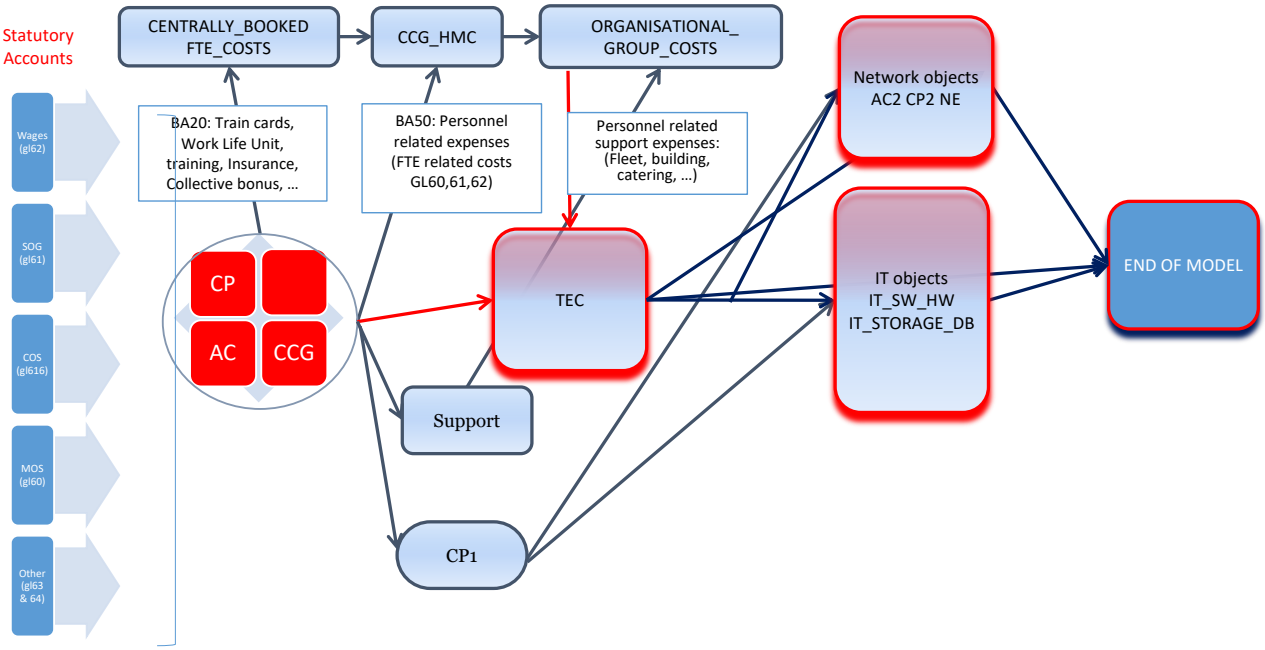
Module ‘Support’ identifies and collects the costs of a number of support objects which a.o. are TEC related. The TEC related support objects primarily concern costs for telco power & space. However, telco power & space costs are not treated in the TEC module and are thus not described in this subchapter.

5.1.3.3 *Graphical view on TEC OPEX allocation flow*

Please note that the markets are not identified as from the 2022 year model and costs are sent to the "EndofModel" module.

Indeed there is no legal obligation to report regulated markets anymore.

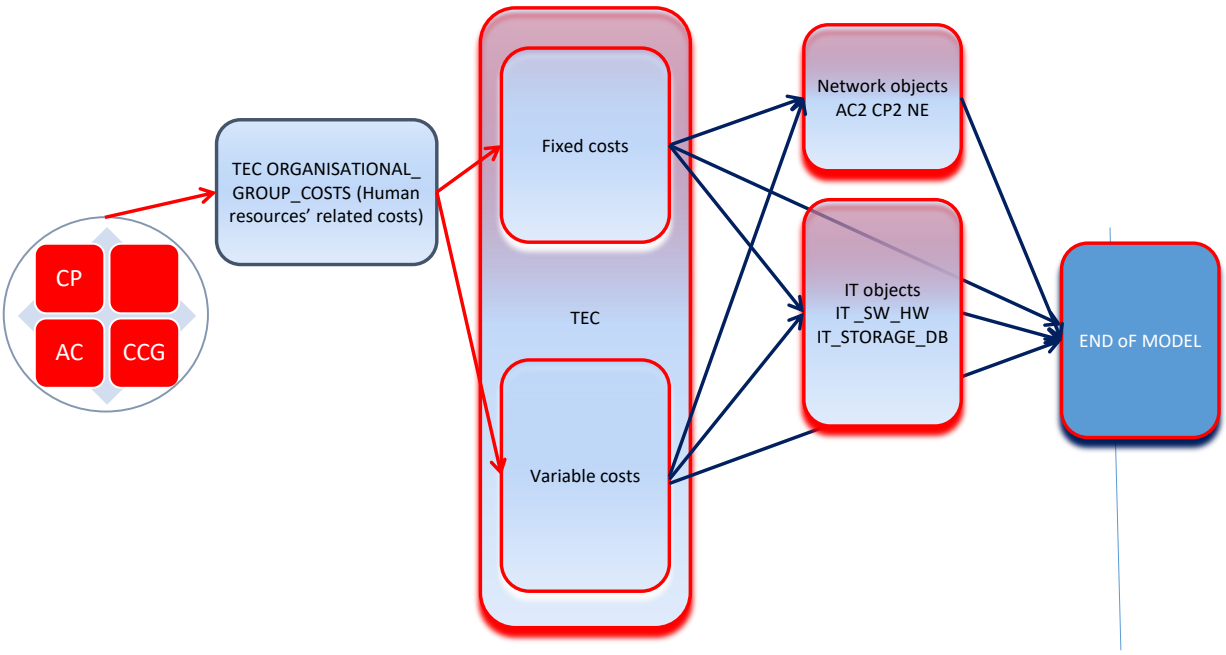
Figure 1: TEC OPEX Flow – General



CP = Cost Pool = a grouping of G/L accounts/costs which have similar characteristics and reside under the same nature of costs.
Typically, the G/L accounts/costs consolidated in a single cost pool feature the same causal relation.
CCG = Cost Center Grouping = grouping of cost centers with comparable characteristics
AC = Asset Class

Figure 2: TEC OPEX Flow – Fix / Var

Introduction of cost variability



5.2 Allocation of TEC OPEX costs not going through the "TEC" TCE module

5.2.1 GL61 accounts – Services and Other Goods (SOG)

The GL accounts in the 61 range mainly register outsourcing, consultancy, renting & maintenance costs as well as miscellaneous costs driven by staff (GSM, memberships, office material, internal events etc.).

The module EXTERNALS receives the respective gross & capex most material GL 61 accounts are registered by team. The capexization level of the human resources (whether they be internal or external) tends to be quite high and there is a high added value in reporting this transparently by team.

>The most material GL 61 accounts to this date not going through the TEC module are pylons & spectrum as well as IT software and hardware sent respectively to the NE (Network Elements) module and the IT SW HW module.

5.2.2 GL60 accounts – Material Out of Stock

The GL60 account costs cover the cost of all kinds of material taken out of the stocks of Proximus and used for the repair and provisioning of network or the cost of small items (office material, GSM,…) consumed by the staff in the context of their daily activities.

Note that movements from stock also occur for the construction of the network; these costs are capitalized. The capitalized MOS costs are implicitly treated with the assets. The opex MOS costs are not material and are allocated along with the main costs of the team where they have been booked.

6 IT stream

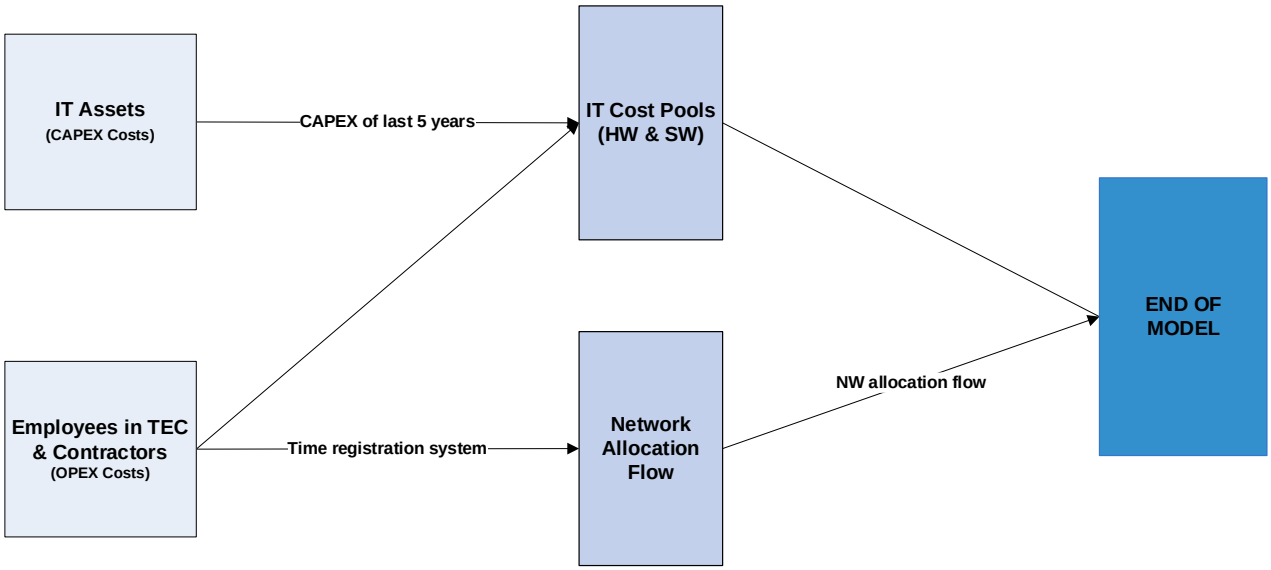
6.1 IT Allocation flow

6.1.1 IT allocation flow: Introduction

The IT model can be summarized by the following drawing representing the different allocation streams

OBJ

OBJ



The allocation stream goal stays the same as it is to link the costs for manpower and infrastructure that are used in order to create, run and maintain applications, components and projects to several model objects each representing an applicative domain.

These costs can be of two different types: capitalized and therefore depreciated following accounting rules (for IT, depreciation length is generally 4 or 5 years), or operational and fully charged for the current year. Depending on the cost's nature, the allocation stream will follow different paths (IT, Network) and use specific inventories and reporting systems in order to create the optimal allocation keys.

Operational Costs:

There are various sources of IT opex costs:

A) Maintenance related:

Maintenance costs are regrouped into 2 different cost pools (G/L 61120 and 61130, respectively IT hardware & IT software) and are now directly allocated to the IT_Software & Hardware module (IT_SW_HW) “IT_Development_Infrastructure_Operations”.

B) OPEX Wages internal

Internal wages for IT OPEX costs were allocated by the use of the RAPID database. A report by cost centers giving a detailed output of OPEX projects was linked to the cost centers groups from the cost base allowing an allocation from all IT teams to the IT Software & Hardware module.

C) OPEX Contractors Bodyshopping and Fixed price:

Bodyshoppers and fixed prices contractors are separated from internal employees and transiting via the new module EXTERNALS before being allocated to the respective teams in the Technology module.

7 Network stream

The network allocation stream is organized around the network investment structure (leading to network elements in the allocation stream). The focus is on Capital Expenditure costs which are directly associated with the network equipment deployed ; these costs originate from the assets accounting system of Proximus and they are gradually cascaded by means of a variety of cost deaggregation keys and a variety of cost drivers up to the Network elements.

For the operating costs of the network itself however, an intermediate allocation approach is used : the remuneration costs and the personnel related OPEX costs are associated to typical network activities (as described in Chapter 5) which are finally attributed to network elements .

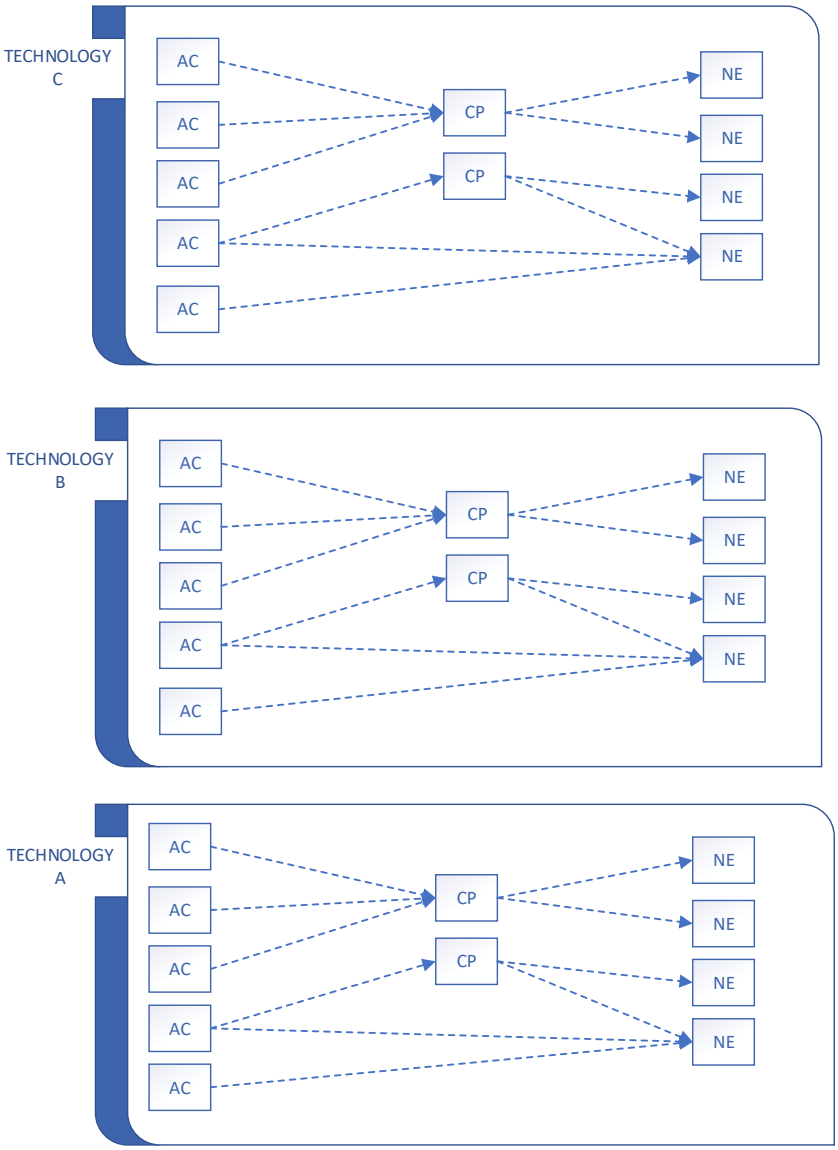


Figure 3: Layered allocation model

The Network- is divided into different technological groups . The main technology groups are : Fibre plant, copper plant, broadband , mobile, idTV, Voice, MPLS/Ethernet, DWDM

The inventories used as input for the asset valuation contain many details allowing the grouping of the costs elements of assets in the right cost pools and further to the right network elements.

Similarly, the details contained in the bottom-up models used to valuate assets also allow appropriate grouping and further allocation to network elements.

Mapping AC objects to cost pools or Network elements

AC2 Aggregation.

At this stage, AC2 asset objects are aggregated into cost pools, network elements, and overhead objects.

The aggregations into cost pools serve to form technology pools for which operational inventories can be queried for various statistics that are further used to decompose into network elements. The technology pools typically are (D)WDM equipment, Copper Cables, Broadband (VDSL) equipment, MPLS Ethernet equipment etc. Those cost pools include also the OPEX .

The aggregation into network elements concerns assets that are already a network element, and it serves also to gather assets that are individually more detailed than the definition of network elements and that can be easily associated to a network element. Typical examples are IP-VPN assets , broadcast TV assets, FTTH, Radio Access assets etc.

AC2 Deaggregation.

By contrast, a set of AC2 assets are decomposed (deaggregated) into cost pools, Network elements or the waste pool .

Among these, some assets collect investments on network administration (Hardware and software supervision platforms) and on value added services platforms (IN, messaging, voice mail etc.): they need to be decomposed into the network technologies they supervise and into the value added service categories.

- ⇨ The driver used is the “cumulatedInvestedAmount” per technology obtained after deep analysis of historical investment data (TM1 financial reporting tool).

The asset collecting internal cabling within technical buildings is decomposed into the cost pools like CP_Backbone_Coax_cabling, CP_Backbone_Optical_cabling, CP_(D)WDM_equipment, VoIP equipment, VDSL equipment).

- ⇨ The driver used is the “Current annualized cost” of the cost pools , calculated from a diversity of constituent volumes and corresponding prices (coax/fibre cables, connectors, copper pair cables , cable ways,etc) . The main volumes are extracted from the infrastructure inventory database (ITR), other volumes are derived under assumptions.

The assets concerning fibre infrastructure are also decomposed into feeding cost pool and distribution cost pool. The driver used “Replacement CAPEX” is the value of CAPEX expenditures for the replacement of the feeding part (based on inventory) and the value of CAPEX expenditures for the recently deployed distribution infrastructure (FTTH).

Deaggregation of cost pools into network elements

In performing the previous steps cost pools are introduced in the model. Some of them are directly allocated to a network element without decomposition , and the others are deaggregated into different Network Elements by means of following drivers:

cost pool	driver name	Deaggregated Network elements
CP_(D)WDM_equipment	Yearly Direct CAPEX Cost	regional&core DWDM network elements and express DWDM network elements
CP_Backbone_Optical_cabling	Nbr_Connections	pre-allocated to all inside network elements using fibre cabling
CP_Backbone_Coax_cabling	Nbr_Connections	pre-allocated to all inside network elements using coax cabling
CP_Copper_Burried_Cables&Splices	yearly direct CAPEX cost	distribution cables, feeding cables network
CP_Ducts&Manholes_Feeding	Trenches cumulated length (km)	Ducts& manholes for Next Generation Access, Ducts & manholes for corporate /complex nodes in access, mobile sites, GPON feeding Backbone and common to access and backbone
CP_EthernetMPLS_equipment	Yearly Direct CAPEX Cost	Ethernet Ports, Ethernet/MPLS switches
CP_Optical_Fibre_Cables_feeding	kmxfibre	Fibre cables for Next Generation Access, Fibre cables for corporate/complex nodes in access, mobile sites, GPON feeding Backbone and common to access and backbone
CP_OMDF	NbrofFibrePorts	pre-allocated to all inside network elements using fibre cabling

8 Annex I: SCF Flow Acronyms

SCF	Support and Customer Flow
BIPT	Belgian Institute for Postal services and Telecommunications
BTN	Business Transformation
CBU	Consumer Business Unit
CC	Costs Center
CCG	Costs Center Group
CP	Costs Pool
CWS	Carrier & WholeSale
CUO	Customer Operations
DIY	Do It Yourself
EBU	Enterprise Business Unit
FAC	Fully Allocated Costs
HCA	Historical Cost Accounting
HMC	Human Manpower Cost
MOS	Material Out of Stock
NRA	National Regulatory Authority
REG	(Proximus) Group Regulatory Affairs
SMP	Significant Market Power
SOG	Services & Other Goods
S&S	Staff & Support

9 Annex II: Network and IT Flows Acronyms

AC	Asset Class
ADSL	Asymmetric Digital Subscriber Line
ATM	Asynchronous Transfer Mode
BA	Basic Access
BAS	Broadband Access Server
BES	Proximus European Solutions
BGC	Proximus
BILAN	Proximus Interconnection of LANs
BLES	Proximus LAN Extension Service
BROBA	Proximus Reference Offer for Bitstream Access
BROTSOLL	Proximus Reference Offer for Terminating Segment of Leased Line
BVAS	Business Value Added Services
CAE	Coverage Exchange Area
CAPEX	CApital Expenditures
CP	Cost Pool
CPE	Customer Premises Equipment
CPU	Central Processing Unit
CWDM	Coarse Wavelength Division Multiplexing
DACS	Digital Analog Cross-connect System
DCN	Data Communication Network
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
DU	Dispatch Unit
DWDM	Dense Wavelength Division Multiplexing
EAA	Extra Access Area
EAL	Ethernet Access Line
EFM	Ethernet First Mile
ESS	Ethernet Service Switch
Ethane	ETHernet Aggregation NETwork
EUS	End User Service
FAC	Fully Allocated Costs

FIFA	Fast Internet Future Architecture
FTTC	Fiber To The Cabinet
FTTO	Fiber To The Office
Gb	Giga bit
Gbps	Giga bits per second
HW	HardWare
IAA	Intra Access Area
iDTV	interactive Digital TeleVision
IN	Intelligent Network
TCE	Telecom CostExpert
IO	In/Out
IP	Internet Protocol
IPVPN	Internet Protocol Virtual Private Network
ISAM	IP Subscriber Line Access Multiplexer
ISDN	Integrated Services Digital Network
LAN	Local Area Network
LDC	Local Distribution Center
LEX	Local Exchange
LL	Leased Line
LTE	Line Terminating Equipment
Mbit	Mega bit
MEO	Modern Equivalent Opex
MOLO	Mobile Other Licensed Operator
MPLS	MultiProtocol Label Switching
MSR	Multi Server Router
MUX	Multiplexer
MVAS	Mass Value Added Services
MWE	MicroWave Equipment
NE	Network Element
NGA	New Generation Access
NGN	New Generation Network
NLS	Network Layer Service
NTE	Network Terminating Equipment

NTP	Network Termination Point
NSF	Network Stage Function
OLO	Other Licensed Operator
OLTE	Optical Line Terminating Equipment
OPEX	OPerational Expenditure
OVH	Overhead
PDH	Plesiochronous Digital Hierarchy
PRA	Primary Access
PSTN	Public Switched Telephony Network
QoS	Quality of Service
RAM	Random Access Memory
ROP	Remote Optical Platform
SDH	Synchronous Digital Hierarchy
SDSL	Symmetric Digital Subscriber Line
STM	Synchronous Transport Module
TDM	Time Division Multiplexing
TV	TeleVision
VAS	Value Added Services
VDSL	Very high speed Digital Subscriber Line
VLAN	Virtual Local Area Network
VoD	Video on Demand
VoIP	Voice over Internet Protocol
VP	Virtual Path
VPLS	Virtual Private Local area network Service
VPN	Virtual Private Network
WDM	Wavelength Division Multiplexing
SDE	Service Delivery Engine
CUO	Customer Operations
CFF	Customer Field Force
TEC	Technology
NEO	Network Engineering & Operations
TSI	Technology, Strategy & Innovation
ITS	Information Technology Services

ARP	Architecture, Road map & Program Office
SPC	Services, Platforms & Cloud