European Commission

Webinar, 14th November 2016

Revised EU GPP criteria for the 'Computers and Monitors' product group

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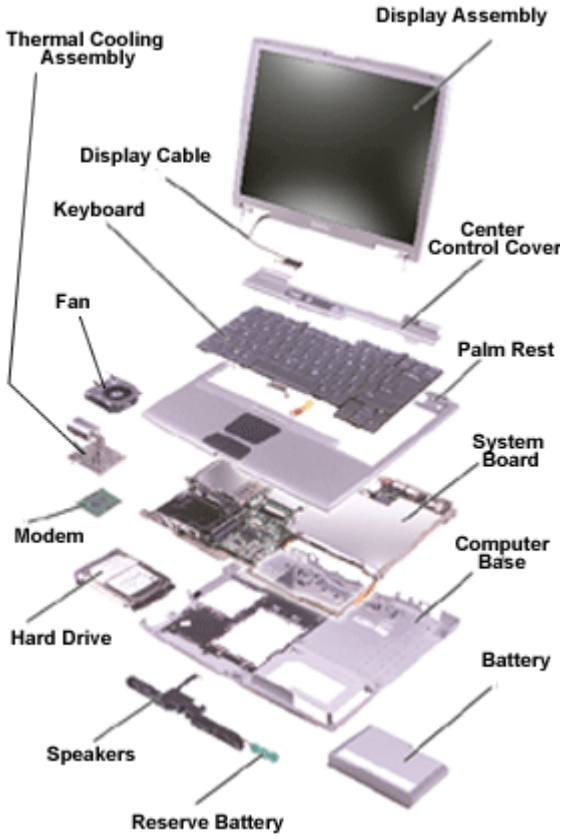
Joint Research Centre

Overview of the presentation

- Scope of the revised EU GPP criteria
- Environmental aspects addressed
- Procurement options and contract types
- Criteria areas
  1. Energy consumption
  2. Hazardous substances
  3. Product lifetime extension
  4. End-of-life management
- Whole Life Cycle Costs



Scope of the EU GPP criteria
Products addressed

Stationary computers

- ✓ Desktop Computers (*incl. Thin Clients*)
- ✓ Small-scale servers
- ✓ Workstations

Display devices

- ✓ Computer monitors

Portable computers

- ✓ Portable All-In-One computers
- ✓ Notebook Computers (*including subnotebooks*)
- ✓ Two-In-One notebooks
- ✓ Tablet Computers
- ✓ Mobile Thin Clients

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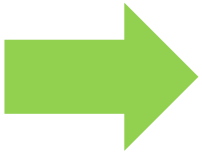
Scope of the EU GPP criteria
Environmental aspects addressed

Key Environmental Aspects

- Energy consumption and resulting Greenhouse Gas emissions from production and use.
- Air, soil and water pollution, bioaccumulation and effects on aquatic organisms due to raw material extraction and processing, and hazardous substances used in products.
- Use of finite resources and critical raw materials to produce IT products.
- Generation of potentially hazardous waste electronic equipment upon its final disposal



GPP Approach

- Purchase energy efficient models
- Purchase products with a restricted amount of hazardous constituents and with a reduced potential for hazardous emissions upon disposal
- Design for durability, upgradeability and repairability
- Product life extension upon the end of its service life
- Design for dismantling and end-of-life management to maximise the recovery of resources

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Guidance for procurers

Procurement options and contract types (1)

1. One-off supply contract: Bidders supply the specified number of items of IT equipment to the required performance specifications;
2. Longer-term framework contract: Contract lays down performance specifications, single or multiple bidders selected to supply items of IT equipment on a 'call down' basis over time. specified period of time.
3. Service contract: Contract lays down the IT functional performance requirements that shall be provided by the selected service provider(s). Potential to request whole life cycle management.

Guidance for procurers

Procurement options and contract types (2)

1. Renewal of old IT equipment: Contract to take away old IT equipment let in parallel with, or in combination with, a contract for the supply of new IT equipment.
   - ✓ Suppliers remanufacture their own brand products and/or can certify data erasure and proper treatment of collected equipment from *any* brand
2. End of life management services: Separate contract may be let with the specific intention of attracting bidders that are specialised in the re-use and recycling of used IT equipment.
   - ✓ In many EU countries, social enterprises are bidding to manage end-of-life IT equipment.

Structure of the criteria
Two ambition levels

The core criteria

- ✓ Suitable for use by any contracting authority across the Member States. They address the key environmental impacts.
- ✓ Designed to be used with minimum additional verification effort or cost increases.

The comprehensive criteria

- ✓ For those who wish to purchase the best products available on the market.
- ✓ May require additional verification effort or a slight increase in cost compared to other products with the same functionality.

1. Energy criteria (1)

Aim: Purchase of energy efficient models

Rationale: Computers compliant with Energy Star requirements are expected to demonstrate significantly reduced energy consumption in the stand-by and idle modes, which represent a significant proportion of computer and monitor energy use.

- **Technical specifications**
  - Latest version of Energy Star for computers/monitors
- **Award criteria**
  - Improvement in energy consumption upon Energy Star E_{TEC_MAX} or P_{ON_MAX}
  - *Alternative option: life cycle electricity costs*

1. Energy criteria (2)

Special obligation: Article 6 and Annex III of the Energy Efficiency Directive (2012/27/EU)

Scope: Central government and purchases above the thresholds set out in the procurement directives.

'Comply with energy efficiency requirements not less demanding than those listed in Annex C of the Agreement between the Government of the United States of America and the European Community on the coordination of energy-efficiency labelling programmes for office equipment ('Energy Star')'

2. Hazardous substance criteria (1)

Aim: Purchase products with restricted amount of hazardous constituents and with a reduced potential for hazardous emissions upon (improper) disposal

Rationale: Some substances used in the manufacture of Office IT Equipment are known to be particularly harmful to the environment or human health.

By having controls for the presence of such substances at the design and production stage, these different life cycle impacts can be minimised.

2. Hazardous substance criteria (2)

- **Selection criteria**
  - Supplier 'Restricted Substance Control' (RSC) system (according to IEC 62476 or equivalent)
- **Technical specifications**
  - Article 33(2) declaration for REACH Candidate List substances
  - Plasticisers in external cables (reflecting new RoHS requirements)
- **Award criteria**
  - Hazardous end of life dioxin, furan and PAHs emissions from printed circuit boards and power cords (according to IEC 61249-2-21 and IEC 62821)

3. Product lifetime extension (1)

Aim: Design for durability, upgradeability and repairability

Rationale:

- Incentivise increased product lifespan and responsibility for repairing any defects.
- Assure that repairable defects will not result in early retirement of equipment.
- Assure that the equipment will not be prematurely retired due to insufficient memory capacity and upgrade potential.
- Reward notebooks and tablets that are more durable and robust, reducing repair costs and extending the life span of equipment.
- Reward increased battery lifetimes, thus reducing environmental impacts and extending battery powered product life spans.

3. Product lifetime extension (2)

- **Technical specifications**
  - Warranty and service agreements, including batteries (minimum 2 years and 3 years)
  - Continued availability of spare parts that are compatible (3 years and 5 years)
  - Design and support for repairability of listed components with universal tools
  - Ease of replacement for rechargeable batteries (defined in terms of tools and steps)
- **Award criteria**
  - Cost competitiveness of spare parts based on indicative price list
  - Longer warranty and service agreement offers
  - Tablet/all-in-one-notebook memory and storage upgrades

3. Product lifetime extension (3)

- **Award criteria**
  - Rechargeable battery life and endurance, with points based on the number of 'charging cycles'
  - Notebook computer drive durability and robustness, with points for one or more protection features
  - Notebook durability testing for the whole product, with points for drop, shock, vibration, screen resilience and temperature stress. *May vary according to the conditions of use for the product.*

4. End of life management (1)

Aim: Product life extension, design for dismantling and end of life management to maximise resource recovery

Rationale: Encourage the design of equipment that can be easily dismantled and recycled at the end of its service life.

Certain combinations of polymers, coatings, metal inlays and alloys may present technical problems for recycling.

The time and complexity of disassembling an IT product at the end of its life is a proxy for the cost effectiveness of extracting components that are valuable from both a cost and environmental perspective.

4. End of life management (2)

- **Technical specifications**
  - Recyclability of plastic casings, enclosures and bezels, comprehensive requirements on metal inserts, paints, coatings
  - Marking of plastic casings, enclosures and bezels, with different weight thresholds by size of device (25g/100g)
- **Award criteria**
  - Product dismantling potential, based on a time thresholds for the manual 'extraction' of listed components

5. End of life management services (1)

Aim: Combined/separate tender for end of life management services

Rationale: The provision of collection services for end-of-service life equipment that can maximise its re-use and recycling.

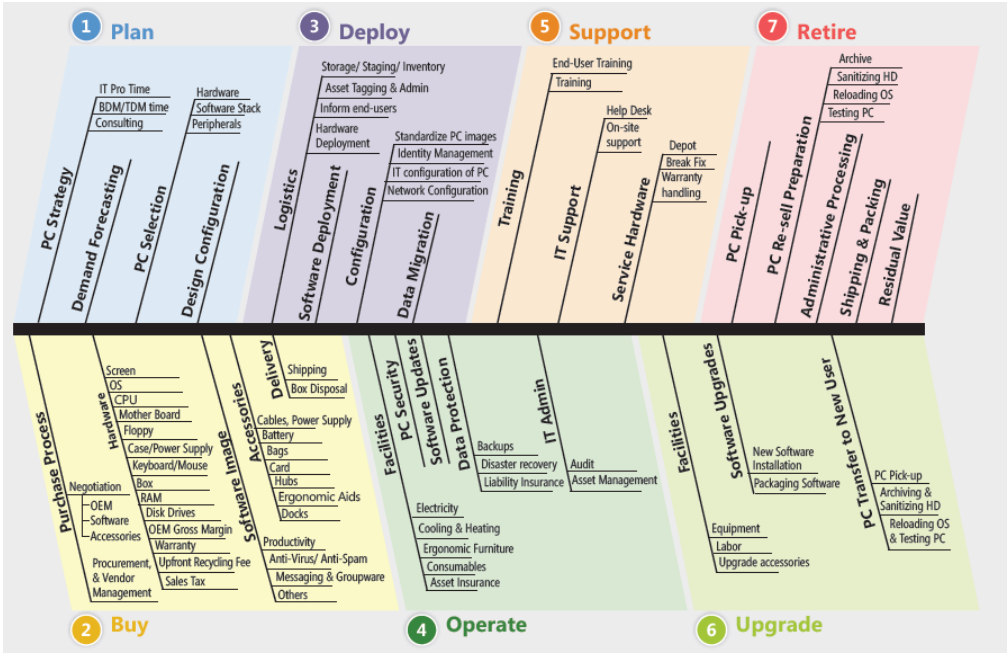
This can be achieved through a combination of collection and sorting of equipment, followed by effective data deletion and sanitation, and then by testing, servicing and upgrading.

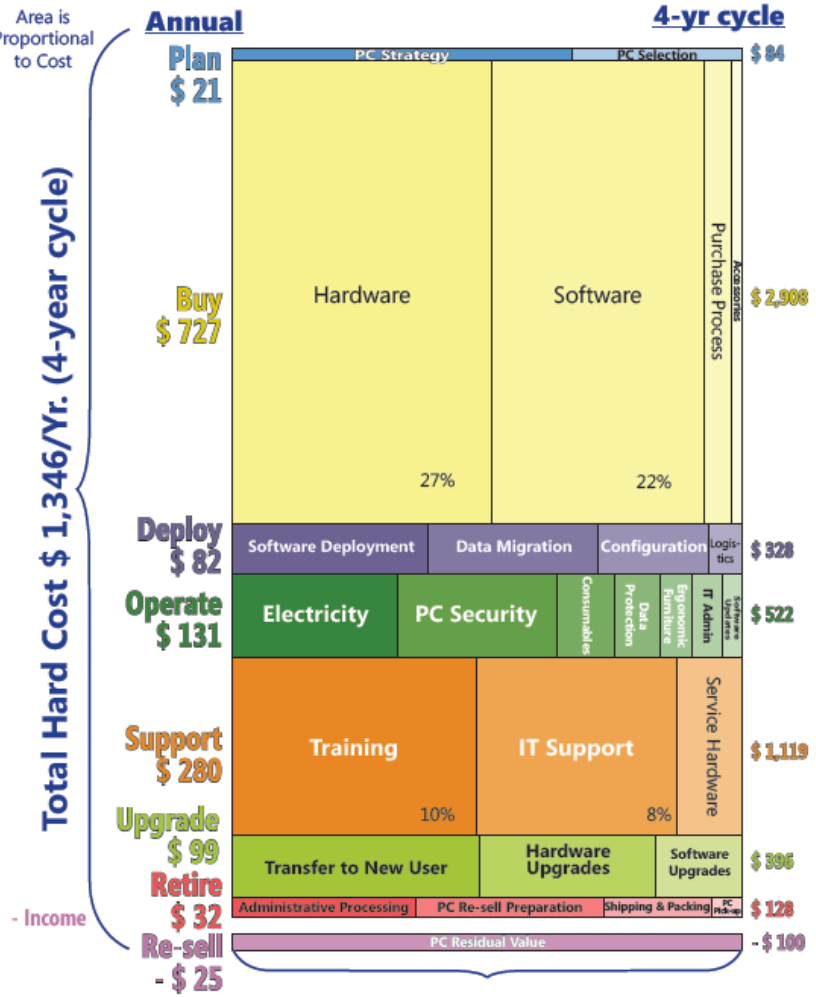
Any recycling or disposal that is necessary shall be carried out in order to recover resources and to the highest environmental standards.

5. End of life management services (2)

- **Technical specifications**
  - Secure computer collection, sanitisation, re-use and recycling, with confidential handling, testing and servicing/upgrading, remarketing for re-use, recycling in accordance with Article 8 and Annexes VII and VIII of WEEE Directive (recast)
- **Award criteria**
  - Inventory tracking system based on unique identifiers for items in the equipment inventory
  - Recycling and depollution with extraction of 'relevant' components for recycling (EN 50625-1 or equivalent)
- **Contract performance clauses**
  - Reporting on equipment status and re-use/recycling facilities

Whole Life Cycle Costs
PC 'fleet management'





Source for both diagrams: **Microsoft (2008)**

Whole Life Cycle Costs
Improvement potential using EU GPP criteria

<u>Electricity bills, equipment repairs and hardware upgrades</u>
56-83% (computers) and 8-13% (displays) of life cycle costs

- Acquisition (hardware)
  - Desktops and notebooks 17-44%, Displays 87-92%
- Operation (electricity use)
  - Potential savings: Desktops 47%-64%, Displays 32%-75%
- Maintenance and upgrading
  - extend notebooks lifespans by at least one year, reduced costs from accidental damage and product failure.
- End of (service) life
  - Potential residual value: up to 7% (re-use) 2% (recycling)

In conclusion
Using the new criteria

- Downloadable from DG ENV website
- Technical report provides further background
- We welcome examples and feedback from experience using them

Please visit the DG ENV website:

http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

European Commission

Thank you for your attention

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Joint Research Centre

GPP Helpdesk Webinar

Reuse of IT appliances

Jasmin Berghammer
14.11.2016
Federal Procurement Agency - Austria

My background

Jasmin Berghammer

Project Manager
Federal Procurement Agency
Vienna, Austria

Education:

- Social Economics – Johannes Kepler Universität in Linz, Austria

Ceritifications:

- Project Management IPMA-Level-D
- Certified CSR- and Sustainability Manager
- Certified Innovation- and Productmanager

Career path:

- 2014 to date: Department for Innovation & Sustainablity / Servicepoint for Innovation Procurement
- 2015 – 2016: EU-funded project GPP2020

Todays‘ topic…

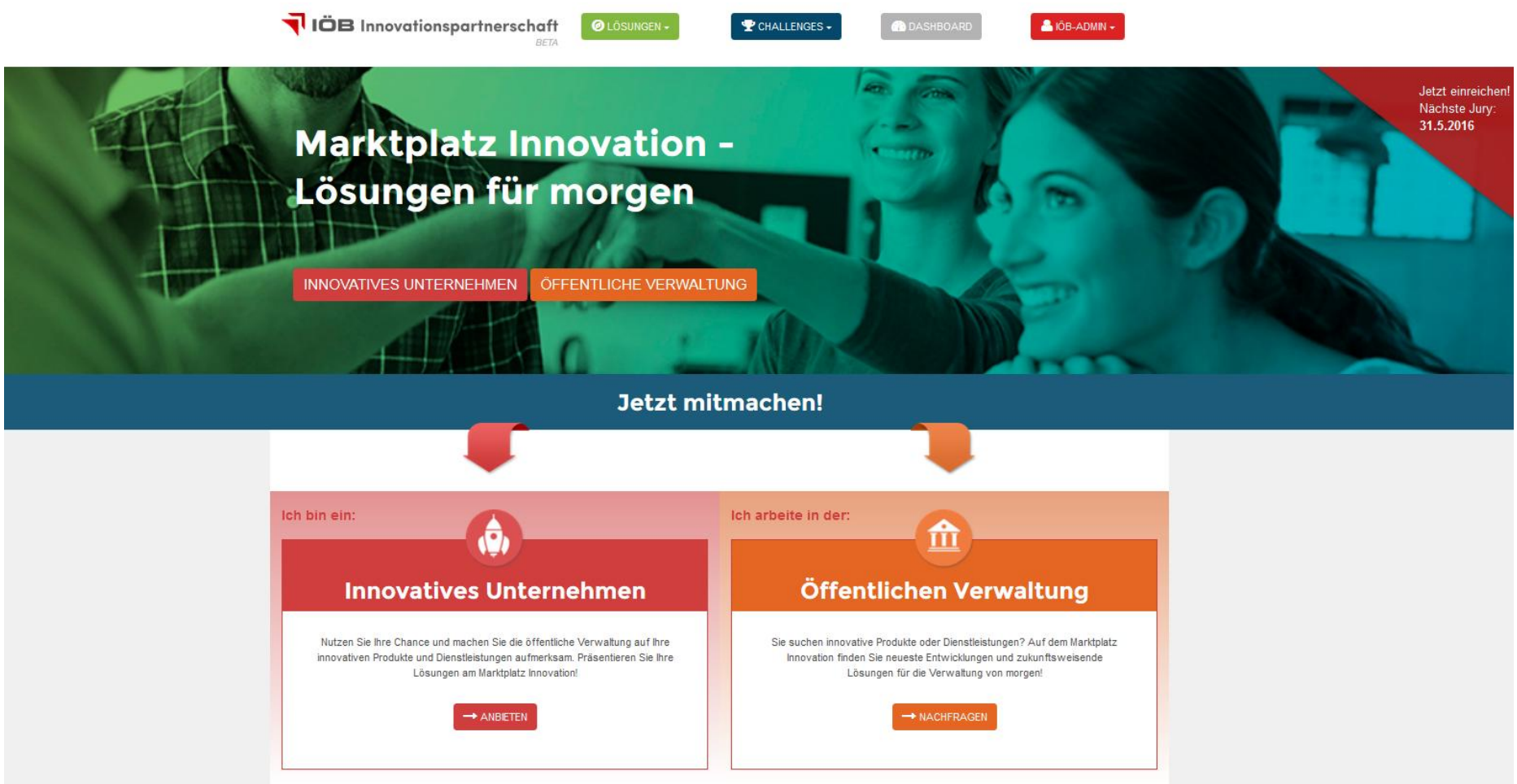
IÖB Innovationsfördernde Öffentliche Beschaffung

BBG BUNDESBESCHAFFUNG

Reuse of IT-appliances

How everything began…

www.innovationspartnerschaft.at



How everything began…

IÖB Innovationsfördernde Öffentliche Beschaffung

BBG BUNDESBESCHAFFUNG

www.innovationspartnerschaft.at/loesungen

Compuritas Hardware-Vergabeprogramm

Status

IÖB tauglich

Meine Bewertung abgeben

Wieviel Sterne vergeben Sie? Klicken Sie hier:

☆☆☆☆☆

Durchschnittliche Bewertung

★★★★☆ (4,0)

1 Beschaffer würden diese Lösung kaufen

Reuse of IT appliances

Compuritas GmbH: Desktop-PCs, notebooks, printers or displays,…

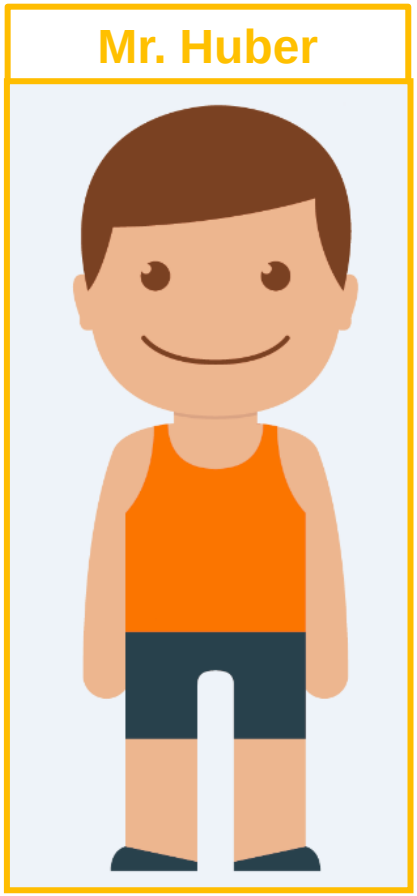
Recovery…
…of old IT-appliances
the collection,
the certified data deletion,
the cleaning.

Sale…
…of old IT-appliances
Usually, the recovered devices for sale are offered with a 2-years-warranty.

- Extension of the lifetime of IT-appliances that are recovered
- Generally, the highest amount of greenhouse gas emissions and energy consumption in the lifecycle of IT-appliances can be attributed to the production of IT-appliances. Thus, the re-use of IT-appliances considerably reduces the environmental impact.

Demand for reuse-appliances

Mr. Huber



IT-Administrator
School in Vienna, AT

- Limited budget – but new IT hardware is very costly
- Some models are no longer available
- According to procurement guidelines issued out by the ministry of education, he is only allowed to buy products that can be bought from the e-shop of the Federal Procurement Agency

Reuse of IT appliances

- Implementation of a „Platform for Direct Awards“ (DVP).
- DVP = suppliers can showcase their products within the e-shop of the Federal Procurement Agency
- User-agreement
- Value: about 0.9 Million €/year (without VAT)

Reuse of IT appliances

Technical Specifications:

- The service covers the following modules:
  - collection of appliances
  - certified data deletion
  - destruction of the data carrier
  - processing of the appliances
  - management of empty toner cartridges
  - Remarketing
  - environmentally responsible disassembling or disposal
  - coaching and consulting on remarketing.

Selection criteria:

- The following three criteria were used as selection criteria for the listing on the DVP:
  - Fulfillment of technical specifications
  - Certified data deletion
  - Social component (share of workers with disabilities,…)

Three suppliers

AfB social & green IT
Ferdinand-Porsche-Straße 9
76275 Ettlingen
Germany

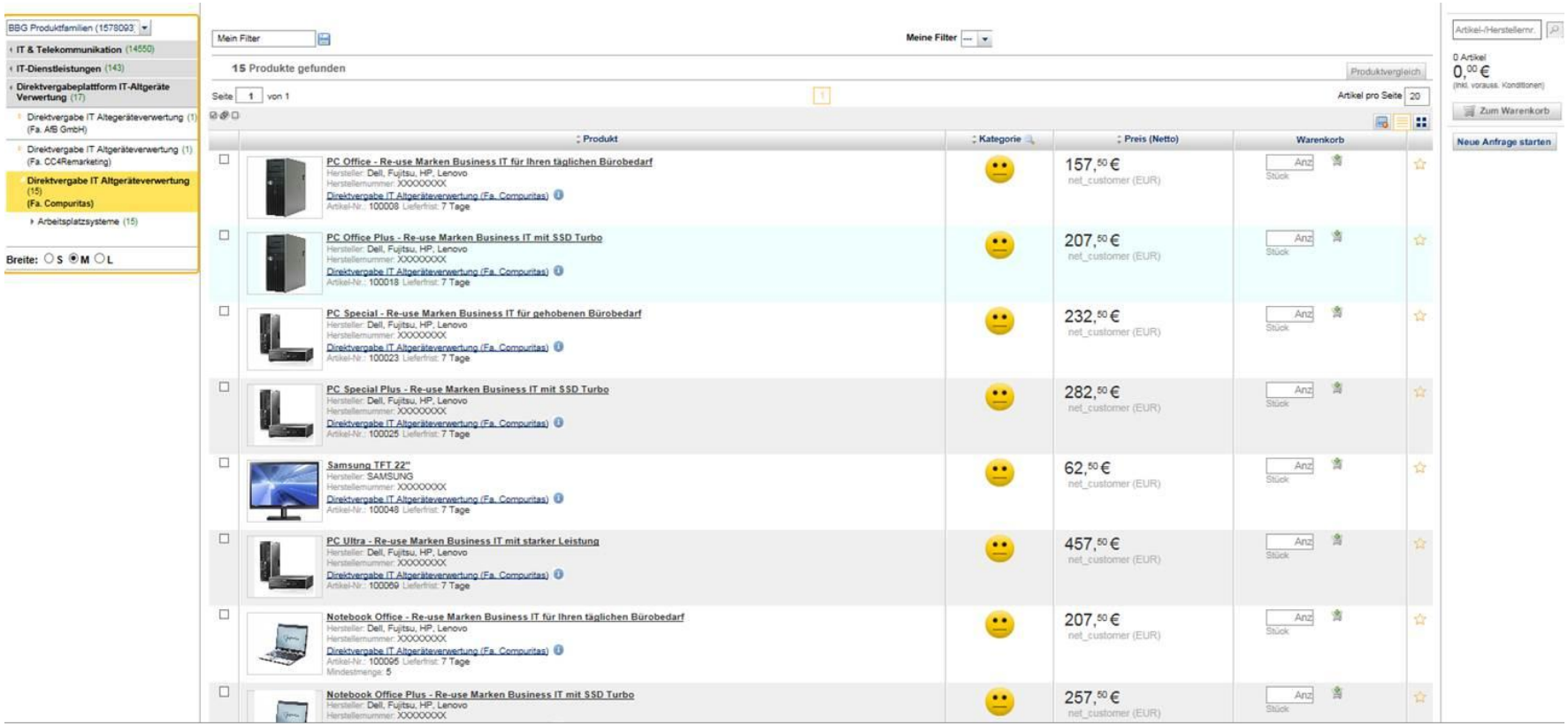
Compuritas GmbH
Annenstraße 49
8020 Graz
Austria

CC4Remarketing GmbH
Hosnedlgasse 16
1220 Wien
Austria

What they have in common:

- Collection and sale of reuse IT devices
- Certified data deletion
- Social component (e.g. handicapped employees)

E-shop


BBG Produktfamilien (1578093)
IT & Telekommunikation (14550)
IT-Dienstleistungen (143)
Direktvergabeplattform IT-Altgeräte Verwertung (17)
Direktvergabe IT Altgeräteverwertung (1) (Fa. AfS GmbH)
Direktvergabe IT Altgeräteverwertung (1) (Fa. CC4Remarketing)
Direktvergabe IT Altgeräteverwertung (15) (Fa. Compuritas)
Arbeitsplatzsysteme (15)
Breite: S M L
Mein Filter
Meine Filter
15 Produkte gefunden
Produktvergleich
Seite 1 von 1
Artikel pro Seite 20
Produkt
Kategorie
Preis (Netto)
Warenkorb
PC Office - Re-use Marken Business IT für Ihren täglichen Bürobedarf
Hersteller: Dell, Fujitsu, HP, Lenovo
Herstellernummer: XXXXXXXX
Direktvergabe IT Altgeräteverwertung (Fa. Compuritas)
Artikel-Nr.: 100008 Lieferfrist: 7 Tage
157,50 €
net_customer (EUR)
PC Office Plus - Re-use Marken Business IT mit SSD Turbo
Artikel-Nr.: 100018 Lieferfrist: 7 Tage
207,50 €
PC Special - Re-use Marken Business IT für gehobenen Bürobedarf
Artikel-Nr.: 100023 Lieferfrist: 7 Tage
232,50 €
PC Special Plus - Re-use Marken Business IT mit SSD Turbo
Artikel-Nr.: 100025 Lieferfrist: 7 Tage
282,50 €
Samsung TFT 22"
Hersteller: SAMSUNG
Artikel-Nr.: 100048 Lieferfrist: 7 Tage
62,50 €
PC Ultra - Re-use Marken Business IT mit starker Leistung
Artikel-Nr.: 100069 Lieferfrist: 7 Tage
457,50 €
Notebook Office - Re-use Marken Business IT für Ihren täglichen Bürobedarf
Artikel-Nr.: 100095 Lieferfrist: 7 Tage
Mindestmenge: 5
207,50 €
Notebook Office Plus - Re-use Marken Business IT mit SSD Turbo
257,50 €
Artikel-/Herstellernr.
0 Artikel
0,00 €
(inkl. vorauss. Konditionen)
Zum Warenkorb
Neue Anfrage starten

Demand for reuse-appliances

Great, that I can now buy reuse appliances via the e-shop of the Federal Procurement Agency

Mr. Huber

IT-Administrator
School in Vienna, AT

Detailed information on project

- www.gpp2020.eu
- EU-funded project
- Find best-practice-examples on low-carbon-tenders
- GPP 2020 implemented more than 100 low-carbon tenders, which directly resulted in substantial CO_2 savings.

Any questions?

Contact Details

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