საპარტნიორო ფონდი

02/1-5
30.01.18

საქართველოს ფინანსთა მინისტრს,

ბატონ მამუკა ბახტაძეს

ბატონო მამუკა,

გიგზავნით ავსტრიული მხარის მიერ შემოთავაზებულ კონცეფციას, რომელიც შეეხება სს „უნივერსალური სამედიცინო ცენტრის“ ბაზაზე სხივური და ბირთვული მედიცინის ცენტრის დაფუძნებას, აღჭურვასა და კადრების მომზადებას. პროექტის სრული იმპლემენტაცია იგეგმება ოთხ წელიწადში.

პროექტის პარტნიორები არიან ავსტრიის განვითარების ბანკი, კომპანიები Elekta, Odelga და ინსბრუკის უნივერსიტეტი.

პროექტის ღირებულება 22 მილიონი ევროს ფარგლებშია, საიდანაც მინიმუმ 32% არის გრანტის კომპონენტი. პროექტი მოითხოვს სახელმწიფოს მიერ გრძელვადიანი 1%-იანი სესხის აღებას.

სს „საპარტნიორო ფონდის“ შეფასებით, აღნიშნული პროექტი არის კომერციულად საინტერესო და მნიშვნელოვანი, როგორც „უნივერსალური სამედიცინო ცენტრის“ შემდგომი განვითარებისთვის, აგრეთვე ქვეყანაში ონკოლოგიური დაავადებების მკურნალობის თანამედროვე სტანდარტების დანერგვაში.

ჩვენ ამ პროექტთან დაკავშირებით მივმართეთ საქართველოს შრომის, ჯანმრთელობისა და სოციალური დაცვის სამინისტროს და დანართის სახით გიგზავნით მათ პოზიციას.

გთხოვთ, თქვენ მოსაზრებას აღნიშნულ პროექტთან დაკავშირებით.

პატივისცემით,

დავით საგანელიძე

აღმასრულებელი დირექტორი

დანართი: 12 (თორმეტი) ფურცელი

საქართველოს შრომის, ჯანმრთელობისა
და სოციალური დაცვის სამინისტრო
MINISTRY OF LABOUR, HEALTH AND SOCIAL
AFFAIRS OF GEORGIA

KA030139151875517

საქართველო, თბილისი 0159, აკ.წერეთლის გამზ. 144, ტელ.: (+995 32) 251 00 11; ფაქსი:(+995 32) 251 00 19; ცხელი ხაზი:(+995 32) 251 00 33; 15 05; ელ ფოსტა: info@moh.gov.ge

144 Ak.Tsereteli ave., 0159, Tbilisi, Georgia, Tel.: (+995 32) 251 00 11; Fax:(+995 32) 251 00 19;Hot line:(+995 32) 251 00 33; 15 05; E-mail: info@moh.gov.ge

№ 01/65261

18 / ოქტომბერი / 2017 წ.

სს საპარტნიორო ფონდის აღმასრულებელ
დირექტორს, ბატონ დავით საგანელიძეს

მის.: ქ. თბილისი, ვუკოლ ბერიძის ქ. N6

ბატონო დავით,

საქართველოს შრომის, ჯანმრთელობისა და სოციალური დაცვის სამინისტრომ განიხილა თქვენი 2017 წლის 6 სექტემბრის N02/1-79 წერილი, რომელიც შეეხება ავსტრიული მხარის მიერ შემოთავაზებულ კონცეფციას სს „უნივარსალური სამედიცინო ცენტრის" ბაზაზე სხივური და ბირთვული მედიცინის ცენტრის დაფუძნების, სრულად აღჭურვისა და კადრების მომზადების თაობაზე.

აღნიშნულთან დაკავშირებით გაცნობებთ, რომ ავსტრიის მხარის მიერ წარმოდგენილ პროექტში დეტალურადაა განხილული სს „უნივერსალური სამედიცინო ცენტრის" შემდგომი განვითარებისა და ქვეყანაში ონკოლოგიური დაავადებების მკურნალობის თანამედროვე სტანდარტების დანერგვის გეგმა (მიუხედავად პროექტში არსებული რიგი უზუსტობებისა, რომლებიც გასათვალისწინებელი იქნება ავსტრიის მხარესთან თანამშრომლობის გაგრძელების შემთხვევაში). აღნიშნული პროექტი მნიშვნელოვანია და შესაბამისობაშია საქართველოში არაგადამდებ დაავადებებათა პრევენციისა და კონტროლის 2017-2020 წლების ეროვნული სტრატეგიის (საქართველოს მთავრობის 2017 წლის 11 იანვრის N2 დადგენილება) მიზნებთან და ამოცანებთან. თუმცა, აქვე უნდა აღინიშნოს, რომ სამინისტროს კომპეტენციას სცილდება პროექტის განხორციელებასთან დაკავშირებული ფინანსური საკითხების უზრუნველყოფა.

პატივისცემით,

მინისტრის მოადგილე ნინო ბერძული

01/1-453
20.10.17

CONCEPT PAPER

PROPOSAL FOR NATIONAL CANCER CONTROL PROGRAM
GEORGIA

Exposee

concept paper to improve cancer services in Georgia
in terms of teaching and education
and integration of necessary equipment therefore
improvement of radiotherapy services
introduction of paediatric radiotherapy
and establishing of a national screening program
improvement of the existing cancer register

PROPOSAL FOR
NATIONAL CANCER CONTROL PROGRAM GEORGIA
CONCEPT PAPER

Content

1 Fact Sheet: 2
1.1 Current Status of Cancer Treatment in Georgia 2
1.2 Reducing the cancer burden: 2
1.3 Early detection: 3
1.4 Treatment 4
1.5 Palliative care 4
2 Action Plan for the Prevention and Control of Cancer Diseases 5
3 Project Realization under Georgia – Tyrol and Tbilisi – Innsbruck partnership and Austrian soft loan financing 6
3.1 Details Project Realization 6
3.2 Project members on the Austrian side are: 6
3.3 Project Phases 7

1 Fact Sheet:

- Cancer is one of the leading causes of morbidity and mortality worldwide
- The number of new cases is expected to rise by about 70% over the next 2 decades.
- Cancer is the second leading cause of death globally, nearly 1 in 6 deaths is due to cancer.
- Approximately 70% of deaths from cancer occur in low- and middle-income countries.
- Around one third of deaths from cancer are due to the 5 leading behavioural and dietary risks: high body mass index, low fruit and vegetable intake, lack of physical activity, tobacco use, and alcohol use.
- Tobacco use is the most important risk factor for cancer and is responsible for approximately 22% of cancer deaths.
- Late-stage presentation and inaccessible diagnosis and treatment are common.
- The economic impact of cancer is significant and is increasing.
- Only 1 in 5 low- and middle-income countries have the necessary data to drive cancer policy.

1.1 Current Status of Cancer Treatment in Georgia

Public Sector:

Considering the 3 pillars of cancer treatment the public sector offers mainly surgical oncology and chemotherapy.

Radiation therapy is not on an actual level and consists mainly in Cobalt treatment.

Therefore the level of education and training does not meet up to date radio therapy standards.

Private Sector:

The private sector offering radiotherapy on advanced level and required highly qualified radiation oncologists, medical physicists, radiation therapy technologists, dosimetrists, psycho-oncologists and oncology nurses.

Hence academic education, training and research programs on a university level are required.
To achieve high quality of cancer care a well-educated and trained multidisciplinary team is mandatory.

1.2 Reducing the cancer burden:

Between 30–50% of cancers can currently be prevented. This can be accomplished by avoiding risk factors and implementing existing evidence-based prevention strategies. The cancer burden can also be reduced through early detection of cancer and management of patients who develop cancer. Many cancers have a high chance of cure if diagnosed early and treated adequately.

Modify and avoid risk factors:

Modifying or avoiding key risk factors can significantly reduce the burden of cancer. These risk factors include:

- tobacco use
- being overweight or obese
- unhealthy diet with low fruit and vegetable intake
- lack of physical activity
- alcohol use
- sexually transmitted HPV-infection
- ionizing and ultraviolet radiation
- urban air pollution
- indoor smoke from household use of solid fuels.

1.3 Early detection:

Cancer mortality can be reduced if cases are detected and treated early. There are 2 components of early detection:

- Early diagnosis
- Screening

When identified early, cancer is more likely to respond to effective treatment and can result in a greater probability of surviving, less morbidity, and less expensive treatment. Significant improvements can be made in the lives of cancer patients by detecting cancer early and avoiding delays in care.
Early diagnosis consists of 3 steps that must be integrated and provided in a timely manner:

- awareness and accessing care
- clinical evaluation, diagnosis and staging
- access to treatment.

Early diagnosis is relevant in all settings and the majority of cancers. In absence of early diagnosis, patients are diagnosed at late stages when curative treatment may no longer be an option. Programmes can be designed to reduce delays in, and barriers to, care, allowing patients to access treatment in a timely manner.

Screening aims to identify individuals with abnormalities suggestive of a specific cancer or pre-cancer who have not developed any symptoms and refer them promptly for diagnosis and treatment.

Screening programmes can be effective for select cancer types when appropriate tests are used, implemented effectively, linked to other steps in the screening process and when quality is assured. In general, a screening programme is a far more complex public health intervention compared to early diagnosis.

- HPV testing for cervical cancer;
- PAP cytology test for cervical cancer
- Mammography screening for breast

1.4 Treatment

A correct cancer diagnosis is essential for adequate and effective treatment because every cancer type requires a specific treatment regimen that encompasses one or more modalities such as surgery, radiotherapy, and chemotherapy. Determining the goals of treatment and palliative care is an important first step, and health services should be integrated and people-centred. The primary goal is generally to cure cancer or to considerably prolong life. Improving the patient's quality of life is also an important goal. This can be achieved by supportive or palliative care and psychosocial support.

Some of the most common cancer types, such as breast cancer, cervical cancer, oral cancer, and colorectal cancer have high cure rates when detected early and treated according to best practices.

Radiation Oncology, Oncologic Surgery and Medical Oncology are the three main pillars of cancer treatment.
Currently the State of Georgia is relying largely on private institutions for radio-oncologic treatment.
These institutions currently do not cover the training and academic education of radiation oncologists, medical physicists, dosimetrists and radiation therapy technologists.

1.5 Palliative care

Palliative care is treatment to relieve, rather than cure, symptoms caused by cancer and improve the quality of life of patients and their families. Palliative care can help people live more comfortably. It is an urgent humanitarian need for people worldwide with cancer and other chronic fatal diseases and particularly needed in places with a high proportion of patients in advanced stages of cancer where there is little chance of cure.
Relief from physical, psychosocial, and spiritual problems can be achieved in over 90% of advanced cancer patients through palliative care.

Effective public health strategies, comprising of community- and home-based care are essential to provide pain relief and palliative care for patients and their families in low-resource settings.
Improved access to oral morphine is mandatory for the treatment of moderate to severe cancer pain, suffered by over 80% of cancer patients in terminal phase.

2 Action Plan for the Prevention and Control of Cancer Diseases

The main elements of the project are:

- Establishment of a modern radiation oncology centre at the National Cancer Institute with 2 high end digital linear accelerators allowing state-of –the-art radiation therapy, brachytherapy, treatment planning, treatment simulation and a comprehensive oncology information system.
- The setup of a modern medical university as an academic training and education and research centre, including the relevant education facilities, and a close partnership with the medical university of Innsbruck, Austria
- Establishing of a palliative care centre at the National Cancer Institute
- Establishing of a countrywide screening program including mobile screening facilities.
- Establishing of a nuclear medicine centre consists of self-shielding mini cyclotron and PET CT scanner.
- Establishing of a countrywide cancer register and research facilities to enable the development of country specific treatment concepts for Georgia.
- Extension of the existing cooperation between Medical University Innsbruck and Governmental University Clinic Georgia with a Telemedicine network access to the tumour board, achieving of a second opinions and assistance for critical cases.
- Establishing of paediatric radiotherapy.
- Assistance in harmonising with European legislative, technical and educational level for cancer treatment. (Medical diplomas should be accepted by European organizations without additional verifications and approvals)
- Establishing of a hotspot on European level in Georgia with synergy effects for the whole region.
- Equalizing of the cancer treatment on a high level and quality assurance by governmental institutions.
- Establishing of a Georgian tumour board compliant with European guidelines and internationally certified. Assistance for specific cases via a telemedicine network in cooperation with the Medical University of Innsbruck.

3 Project Realization under Georgia – Tyrol and Tbilisi – Innsbruck partnership and Austrian soft loan financing

3.1 Details Project Realization

Currently there is an opportunity to establish health care project under:

- Project financing via the Austrian Government Soft Loan Scheme. This financing model allows competitive investments into projects under the Georgian government including a grant element of at least 32%.
- Technical assistance for design, education, structuring of a cancer register, organizing of teaching and education facilities and postgraduate programs via the partnership programs between Innsbruck – Tbilisi and Georgia – Tyrol.

Indicative the following financing parameter currently are applicable:

- Loan amount per project: 5-6 Mio Euro (on request there is a possibility to increase)
- Financing: 100% of an confirmed project
- Repayment: 26 equal consecutive semi annual instalments 54 months after provisional acceptance of the project.
- Interest rate: currently fixed rate 0.0%
- Guarantee fee: 1% p.a. on the amount of credit facility

Therefore an academic centre covering education and research in the important discipline of modern radiation oncology is highly recommended.
This project brief describes how this could be realized as a turn-key project in the framework of Tbilisi State Medical University by an Austrian - Georgian cooperation, consists of:

- Knowledge transfer and education programs, international certification.
- Austrian soft-loan financing
- Design and project management
- Awarding and monitoring of local works to adapt the existing facilities
- Supply of the medical equipment and radiation therapy

3.2 Project members on the Austrian side are:

- Odelga Med GmbH as project integrator
- Elekta GmbH for the radiation oncology systems and software
- Medical University of Innsbruck as an Academic partner.
- Empl for the supply of mobile screening units

There is a limitation of funds for each single project. Splitting the country cancer treatment concept into functional units a masterplan for the future can be developed.

Such a masterplan is absolutely worthwhile because the establishment of such complex medical infrastructure should be implemented in several steps, whereas the level of treatment is increasing with each step.

3.3 Project Phases

Phase	Supply of Equipment	Education Training Program	Budget frame
1	Building adaption at Cancer institute part 1 Supply 1 LINAC platform basic configuration Supply of 1 brachytherapy unit Supply of one 1 planning CT Supply of IOS and planning software Supply of teaching and education facilities Telemedicine Infrastructure	Lectures in Georgia by international experts. Lectures for Contouring, treatment planning, dose management in Georgia. Postgraduate training programs at university clinic Innsbruck for a period of 6 month in parallel during implementation of the project. Technical and Medical user training at the supplied equipment. Telemedicine instruction and training in Georgia and Austria.	EUR 5.000.000.-
2	Building adaption at Cancer institute part 2 Supply of 1 LINAC platform basic configuration. Equipment supply for a palliative care centre Equipment supply for cancer screening program part 1 Supply of teaching and education facilities. Establishing of a pre-treatment monitoring system.	Assistance to harmonise the cancer register in Georgia on a European level. Assistance to build up cancer screening programs in Georgia by organizing workshops between Austrian and Georgian experts. Lectures in Georgia by international experts. Postgraduate training programs at university clinic Innsbruck for a period of 6 month in parallel during implementation of the project. Scientific exchange program between Austria and Georgia to improve cancer treatment.	EUR 5.000.000.-
3	Upgrading of 2 LINACs for advanced treatment technics. Equipment supply for cancer screening program part 2 Software upgrading. Establishing of a paediatric radiotherapy and upgrading of the existing ward.	Lectures in Georgia by international experts for advanced treatment techniques. Postgraduate training programs at university clinic Innsbruck for a period of 6 month in parallel during implementation of the project on advanced treatment techniques. Technical and Medical user training at the supplied equipment.	EUR 4.500.000.-
4	Building adaption at Cancer institute part 3 Supply of Mini cyclotron and PET CT scanner.	Nuclear medicine lectures in Georgia by international experts. Postgraduate training programs at nuclear medicine institute Innsbruck for a period of 6 month in parallel during implementation of the project. Technical and Medical user training at the supplied equipment.	EUR 4.500.000.-

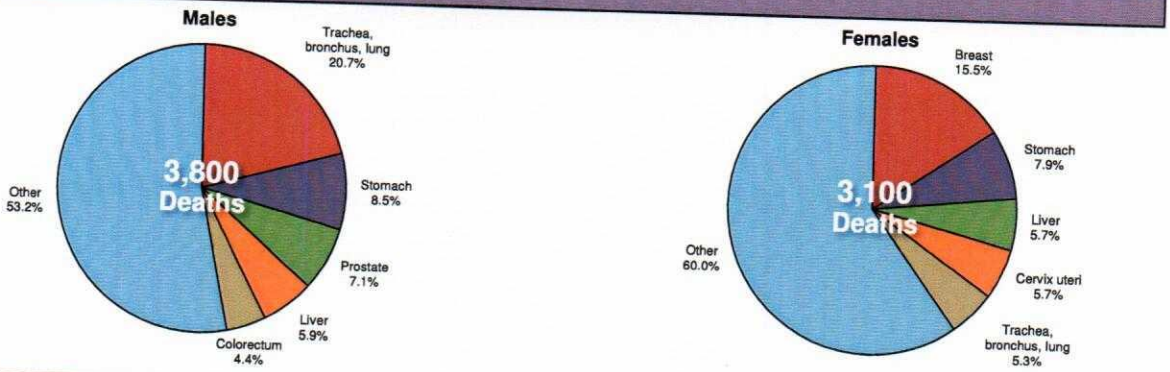
The above structured project road map indicates just a rough idea of a possible project and a more detailed and mutual confirmed project proposal is mandatory to proceed.

Georgia

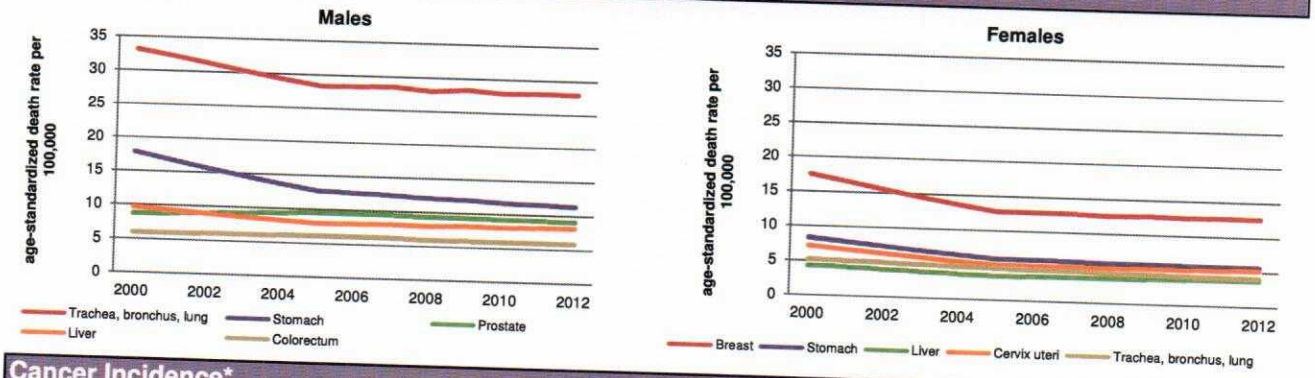
Total population: 4,358,000
Income group: Lower middle

Total deaths: 50,000
Life expectancy at birth: Total:74 Males:70 Females:78

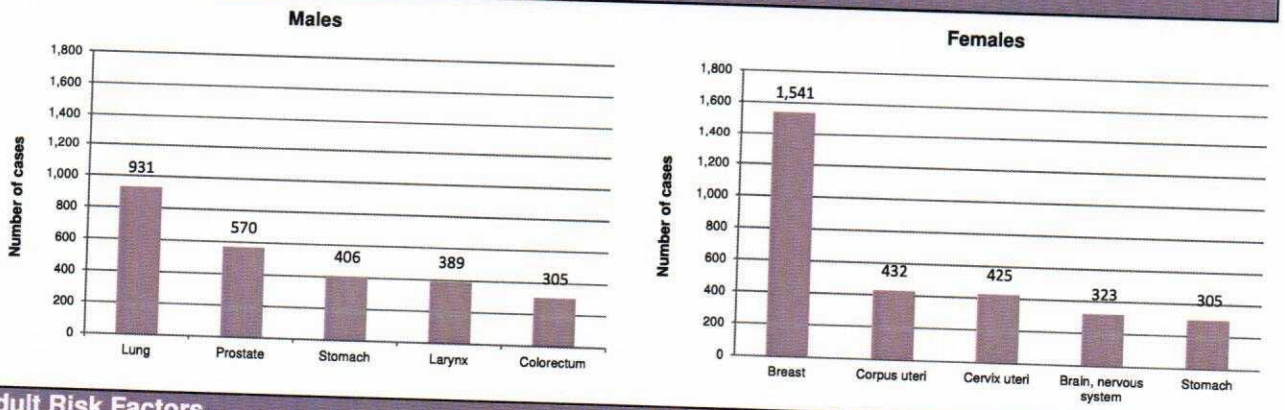
Cancer Mortality Profile



Age-Standardized Cancer Mortality Trends



Cancer Incidence*



Adult Risk Factors

	Males	Females	Total
Current tobacco smoking (2011)	55%	2.5%	26.6%
Total alcohol per capita consumption, in litres of pure alcohol (2010)	12.6	3.4	7.7
Physical inactivity (2010)	21.1%	23.7%	22.5%
Obesity (2014)	17.9%	25.9%	22.1%
Household solid fuel use (2012)	-	-	46.0%

World Health Organization - Cancer Country Profiles, 2014.

Cancer Plans, Monitoring and Surveillance

Has an operational cancer policy/strategy/action plan	No
Has a cancer registry	Yes
Scope	Population-based
Coverage	Subnational
Last year of data	2012

Cancer Primary Prevention Policies

Tobacco control

Has an operational policy, strategy or action plan to reduce the burden of tobacco use	No
Smoke-free legislation	Three to five public places completely smoke-free
Tobacco dependence treatment	NRT and/or some cessation services (neither cost-covered)
Warning labels	Medium size warnings with all appropriate characteristics OR large warnings missing some appropriate characteristics
Bans on advertising, promotion and sponsorship	Complete absence of ban, or ban that does not cover national television, radio and print media
Tobacco taxes	51–75% of retail price is tax

Overweight and obesity prevention and control

Has an operational policy, strategy or action plan for reducing overweight/obesity	No

Physical inactivity prevention and control

Has an operational policy, strategy or action plan to reduce physical inactivity and/or promote physical activity	No

Harmful use of alcohol prevention and control

Has an operational policy, strategy or action plan to reduce the harmful use of alcohol	No

National immunization

Human Papillomavirus vaccination schedule	...
Hepatitis B vaccination schedule	Birth
Hepatitis B vaccination coverage, infants	93%

Cancer Screening and Early Detection

Cervical cancer

Cervical cytology (PAP)	Not generally available at the public primary health care level
Acetic acid visualization (VIA)	Not generally available at the public primary health care level

Breast cancer

Breast palpation / clinical breast exam (CBE)	Not generally available at the public primary health care level
Mammogram	Not generally available at the public primary health care level

Colorectal cancer

Faecal occult blood test or faecal immunological test	Not generally available at the public primary health care level
Bowel cancer screening by exam or colonoscopy	Not generally available at the public primary health care level

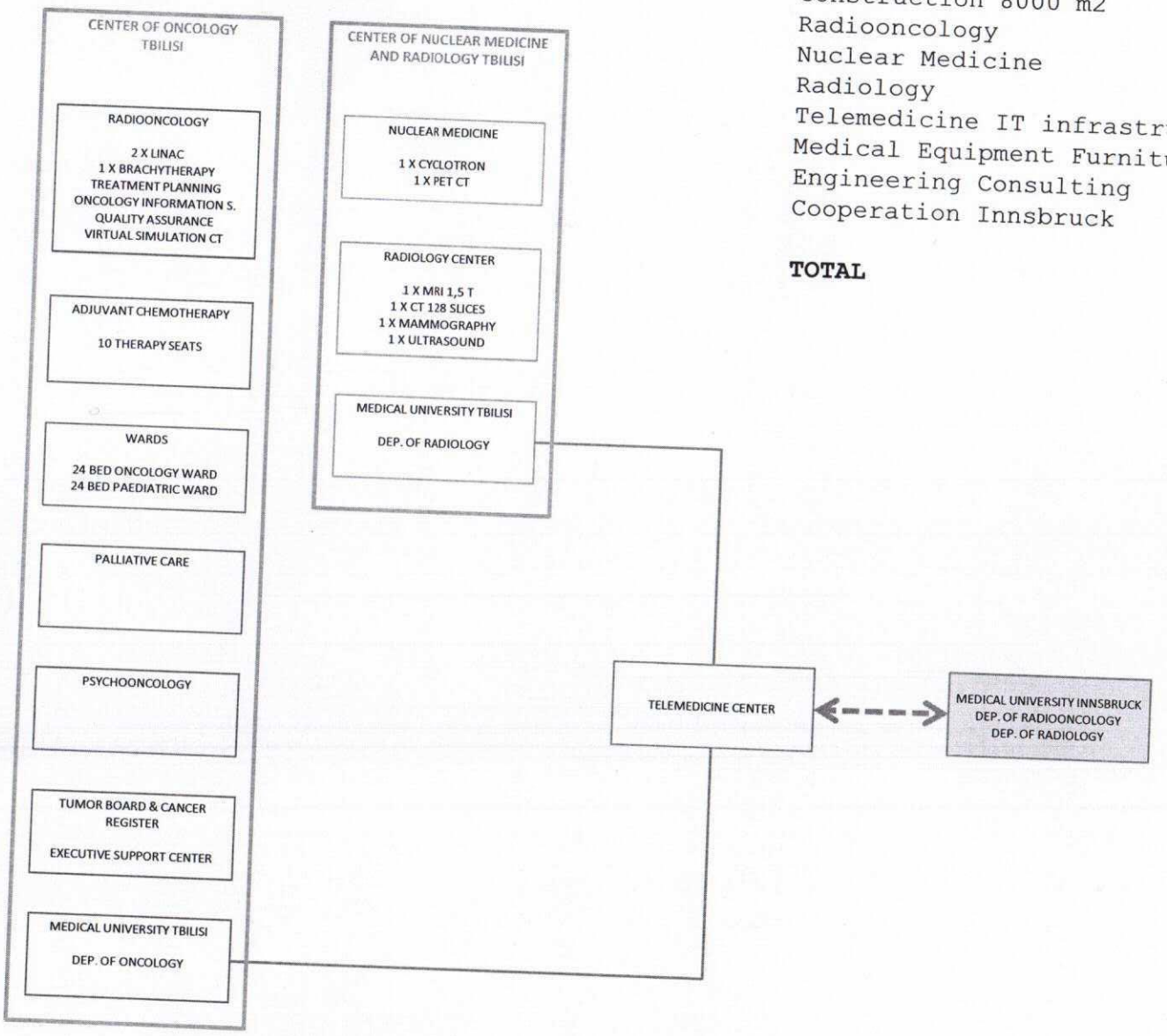
Cancer Treatment and Palliative Care

Radiotherapy	Not generally available in the public health system
Total high energy teletherapy units / million inhabitants	1.4
Number of radiotherapy centres	5
Number of radiation oncologists	26
Chemotherapy (medicines not specified)	Not generally available in the public health system
Oral morphine (formulation not specified)	Not generally available in the public health system
Non-methadone morphine equivalent consumption per cancer death (mg)	...
Community/home care for people with advanced stage cancer and other NCDs	Not generally available

* No incidence data available. Figures are based on national mortality estimates and modelled survival.

... = No data available

The project was revised later:
Construction costs were added.



Construction 8000 m2	Euro 5.600.000.-
Radiooncology	Euro 6.000.000.-
Nuclear Medicine	Euro 4.000.000.-
Radiology	Euro 3.000.000.-
Telemedicine IT infrastructure	Euro 500.000.-
Medical Equipment Furniture	Euro 1.700.000.-
Engineering Consulting	Euro 400.000.-
Cooperation Innsbruck	Euro 750.000.-
TOTAL	**EURO 21.950.000.-**