**PROJECT INFORMATION FICHE AND QUESTIONNAIRE FOR ALLOCATION REQUEST**

**MUNICIPAL WATER INFRASTRUCTURE NORTH MACEDONIA**

# BASIC INFORMATION

* Project number:
* Municipality:
* Project name, location:

*Component 1:*

*Component 2:*

*Etc*

* Contact person:
  + Can contact person communicate in English (yes/no):
  + Address:
  + Telephone no:
  + E-mail:
* Form filled in by:……………………(Name, organisation), Date: ……………
* Form validated by:……………………(Name, organisation), Date: ……………
* Version and date of revision(s), if applicable:

# PROJECT DESCRIPTION

## The Project

* Give a brief description of the overall project (what is the purpose), and the main components (length of pipes, quantities, capacity etc.), state the scope - new construction/extension/ rehabilitation.
* Provide one or several overview map(s) of the project area (in pdf file, max. A3 format) which distinguish between existing and foreseen infrastructure and which show(s):
* Municipality, all towns or villages concerned by the project components,
* Available water resources (groundwater bodies, reservoir lakes, lakes, rivers) and main infrastructure of the water supply system (aqueducts, treatment plants, service reservoirs, pumping stations, trunk mains);
* If existing: main facilities of the wastewater collection and treatment system (main collectors, treatment plants, overflows to rivers or lakes);
* If separate from wastewater: main facilities of the storm water collection and treatment system (storm water retention tanks, main collectors, overflows to rivers or lakes).
* Floods protection infrastructure (if relevant);

## Background

* Description of existing situation and reasons for wanting to undertake the project, including a description of current deficiencies/risks in water supply/wastewater/environment. In particular, highlight any known health issue to be addressed by the project or known potential impact on/risk to water supplies.
* Criteria for the prioritization of the proposed scheme (emergency, urgent, high-priority, mid, or low priority), explain the reason.
* Institutional and legal framework (administration, ownership and operation of water infrastructure, existing facilities). In particular, are water services a dedicated utility or are they part of a multi-utility?
* Is there any existing or potential inter-municipal cooperation for water or wastewater services, such as a regional water supply system or cooperation with other towns? In particular, are there ideas, possibilities for connection to water/wastewater systems in other municipalities?
* Description of ongoing water and waste water projects (see also separate investment questionnaire in EXCEL format).
* Phasing and link to sector plans/programmes or to urban or regional Master Plans. If yes, please provide the planning horizon (e.g. 2035) and the year of approval.
* Current/envisaged involvement with other donors/agencies/international financing institutions agreed by the Government of the Borrower.
* For all water sources used please provide technical details (e.g. depth of wells, number and depths of intakes from a reservoir lake) and describe the basic treatment steps.
* If wastewater treatment is available, please provide capacity of the plant(s) and treatment technique(s) used including sludge disposal. If relevant, mention types of industrial wastewater discharged into the system and level of pre-treatment.
* State the river-basin/sub/river/basin to which the project area belongs, the name of the receiving water body, and describe the river basin management authority.

## Service Area

* If the service area is identical with the municipality area, only fill one column
* If the service areas for water supply and for wastewater collection and treatment are not the same please indicate the relevant population and size.
* In case data are not available, please provide estimate and indicate with \* (*explanations might be provided below the table*)

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Service area | Municipality |
| General data | Average household size |  |  |
| Average household income per month |  |  |
| Water supply | Total population |  |  |
| Physical area (km²) |  |  |
| Number of people benefitting from the project |  |  |
| Number of people supplied with piped water supply from the central system |  |  |
| Is supply discontinuous to any area for any part of the year? If so, when and how many hours of supply are provided? |  |  |
| Length of central system water supply network (excluding house connections) in km |  |  |
| Number of water supply connections |  |  |
| Number of water supply connections that are metered |  |  |
| Capacity of water treatment plant, m3/d |  |  |
| Wastewater | Total population |  |  |
| Physical area (km²) |  |  |
| Number of people benefitting from the project |  |  |
| Length of sewer system (excluding house connections) in km |  |  |
| Number of people connected to piped wastewater collection network |  |  |
| Number of people connected to piped wastewater collection network and wastewater treatment plant |  |  |
| Capacity of wastewater treatment plant, PE |  |  |
| Number of people using septic tanks |  |  |
| Storm water | Physical area (km²) |  |  |
| Number of people benefitting from the project |  |  |
| Length of storm water system in km |  |  |
| Type of system (separate or mixed) |  |  |
| Flood protection | Physical area (km²) |  |  |
| Number of people benefitting from the project |  |  |

## Average Water Balance for the service area

* Data to be given as a daily average for the latest calendar year available.
* The water balance is for the service area relevant for the project (village/town/municipality).
* If data are not available either provide estimate (and indicate with \*) or indicate “n.a.” (not available).

### Water production

|  |  |  |
| --- | --- | --- |
| Component | Unit | Volume |
| 1. Groundwater Abstraction | m3/day |  |
| 1. Spring or source Abstraction | m3/day |  |
| 1. Surface Water Abstraction from river or lake or reservoir | m3/day |  |
| Total Produced volume of drinking water (A+B+C) | m3/day |  |
| Of which: *pumped* into the distribution network | m3/day |  |
| Of which: *gravity fed* into the distribution network | m3/day |  |

### Water distribution

|  |  |  |  |
| --- | --- | --- | --- |
|  | Domestic | Commercial | Other |
| (M) Metered legal consumption (m3/day) |  |  |  |
| (UM) If relevant: un-metered legal consumption, (m3/day) (\*) |  |  |  |
| Sub-totals (M+UM) |  |  |  |
| Total billed consumption (m3/day) |  | | | |
| Estimated leakage (m3/day) |  | | | |
| Per capita domestic consumption  (litres / person /day) |  | | | |
| Number of network bursts per year |  | | | |

(\*) only relevant in case there is a fixed component (e.g. billing per connection, billing per inhabitant, billing per month, lump sum). See 2.14.1 and 2.14.2 for explanation

### Wastewater collection and treatment

|  |  |
| --- | --- |
| Wastewater collected (m3/day) |  |
| Wastewater treated (m3/day) |  |
| Estimated infiltration into sewers from groundwater/surface (m3/day) |  |

## Trends for last 5 years in the relevant supply area

* All data are the totals for the whole year, counting back 5 year period from the year when this PIF is submitted.
* If data are not available either provide estimate (and indicate with and indicate with “(e)”) or indicate “n.a.” (not available).
* Please provide a comment in case of a significant drop or rise in population or volumes

### Potable water supply

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Served Population | Total Water Production | Billed Domestic Consumption | Billed other Consumption | Total billed consumption (col 5 = col 3 + col 4) | Non-revenue water  (col 6 = 2-5) | Pipe bursts |
| Unit | Inhabitants | Million m3/year | Million m3/year | Million m3/year | Million m3/year | Million m3/year | Number |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2018 |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |
| 2020 |  |  |  |  |  |  |  |
| 2021 |  |  |  |  |  |  |  |
| 2022 |  |  |  |  |  |  |  |

### Wastewater Treatment

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Connected Population | Wastewater collected | Wastewater treated |
| Unit | Inhabitants | Million m3/year | Million m3/year |
| 2018 |  |  |  |
| 2019 |  |  |  |
| 2020 |  |  |  |
| 2021 |  |  |  |
| 2022 |  |  |  |

## Technical Description

The description of proposed project shall include:

* Overall scope of the project(s) at the municipal level, and the list of components.
* Brief justification of the chosen solution and mention of the alternatives considered (if any) and reasons for discarding,
* relevant key dimensions (main data only):
  + water mains and sewers: length(s), diameter(s), and material(s)
  + reservoirs: capacity, water height, material,
  + pumping stations: max. capacity, number of pumps, fixed or variable speed, command (local or remote)
  + water or waste water treatment plants: technology, capacity
* design assumptions used (such as water demand per inhabitant, pollution load, etc.) and planning horizon (such as 10 years, 20 years), or with date (2030, 2040 etc.). It is not necessary to provide titles of standards or design rules.
* If available, in addition to the map already provided in 2.1, please include plans or drawings in suitable scale and format (pdf file, max A3 size) showing the layout, indicating existing and proposed key water and waste water infrastructure such as water mains, pumping stations, treatment plants, trunk sewers. Please do not provide detailed drawings such as profiles, cross sections, etc.

## Level of preparation of the project and responsibilities for preparation/implementation

* List of relevant studies and plans carried out recently. Please provide the year of approval, the name of organisation, type of organisation (consultant, state institute/agency, other)
* Please provide for each of the project’s components (e.g. water intake, treatment plant, transmission main etc.) the level of planning and design in table format. Have the planning and/or construction permits/approvals been obtained for all components? If yes, please give the relevant dates, if not provide the expected dates. If several permits are required, please add additional columns as appropriate.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Documents available**  (please tick all relevant boxes) | | | | **Permits**  (please indicate the dates) | |
| **Project Name** | **Planning documentation** | **Main Design** | **Revision on MD** | **EIA** | **Obtained** | **Planned** |
| **Component 1:** |  |  |  |  |  |  |
| **Component 2:** |  |  |  |  |  |  |
| **Component 3: etc.** |  |  |  |  |  |  |

* Have the future sites of major installations (such as pumping station, reservoir, WWTP etc.) already been chosen?
* Has all the land required for the project been acquired? If not, please indicate the current status and the expected date of acquisition and compensation.
* Will the project require temporary or permanent involuntary resettlement? If yes, please provide all relevant information.
* Please provide the names of agencies/organisations/consultants responsible for further project preparation (design/tender documents).

## Environmental (including hydrological) and social impacts, climate action

* Please explain briefly any potential negative effects that the project may have on the environment and population (during construction phase and during operation phase).
* Is an Environmental Impact Assessment (EIA) required under law? Have the EIAs been performed? If so, provide non-technical summary. Describe manner of public participation.
* Where the project area is adjacent to a river/stream, what is the approximate low flow of the receiving river/stream (m³/hr)?
* Is the there any flooding experience/risk of flooding in the project area?
* Is there any drought experience in the project area?
* Is there a climate risk vulnerability assessment for the project, the project area or the region carried out? If not, have increased risks of flooding and drought taken into account in the design of project components?
* Are there any areas of nature conservation interest in the vicinity or downstream (nature reserves, area with special wildlife/natural features)? If yes, has a screening been carried out under either the EIA or other procedures?
* Please submit a form similar to Form A or B (Article 6 of the Habitats and Birds Directive) signed by the competent authority responsible for the monitoring of conservation sites (Natura 2000 or similar) for a scheme (or package of schemes) having a potential effect on a conservation site as a result of their proximity to the site, or provide confirmation that the scheme will not have any potential effect on habitats or conservation site. This declaration should confirm that the required assessments have been carried out (if necessary), that the scheme will have no significant impact on any protected site and that the appropriate mitigation measures have been identified.
* Are there any industrial enterprises operating in the area? What industries have operated in the past? Are industrial zones upstream the proposed sewer or WWTP treating their industrial discharges?

## Planned implementation period

* Contract ready for award: [..] months after the Bank’s endorsement of the fiche.
* Construction period: [..] months after notification to contractor.

## Investment cost estimate

* Please provide all items in current prices to be updated accordingly for each component, if applicable.
* The investment cost breakdown, financing plan and sources of funds shall also be presented on an EXCEL spreadsheet the template of which shall be submitted by the Bank.

|  |  |  |
| --- | --- | --- |
|  | **MKD** | **EUR (1)** |
| Design |  |  |
| Supervision of design |  |  |
| Supervision of civil works |  |  |
| Civil works  - Item 1  - Item 2  - etc. |  |  |
| Mechanical/electrical equipment  - Item 1  - Item 2  - etc. |  |  |
| Supply of maintenance equipment |  |  |
| Land Acquisition |  |  |
| Miscellaneous |  |  |
| Technical contingencies |  |  |
| Price contingencies (…% escalation p.a.),  if applicable (2) |  |  |
| VAT (3) |  |  |
| Total |  |  |

(1) 1 EUR = current exchange rate, (to be updated accordingly)

(2) Please make clear what kind and amount of contingencies have been applied

(3) Note (Please explain the VAT procedures and percentage)

## Expected expenditure schedule by origin of funds (in MKD excluding VAT)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Origin of Funds** | **Total** | **Breakdown by Year** | | | | | |
| **2022** | **2023** | **2024** | **2025** | **2026** | **2027** |
| Government/EIB credit |  |  |  |  |  |  |  |
| Municipality |  |  |  |  |  |  |  |
| Other own/ national contribution |  |  |  |  |  |  |  |
| Co-financing International Financing Institution(s) |  |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |  |

## Procurement Plan

* Please fill in the EXCEL table - Procurement Plan.

## Operation and maintenance (O&M) cost elements of the facilities

* The O&M cost shall be indicated for the operator relevant for the project area.
* If data are not available either provide estimate (and indicate with \*) or indicate “n.a.” (not available).
* In case of newly created infrastructure (including extensions of existing infrastructure) use the data of the future operator.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Cost element** | **Unit** | **Present O&M** | | | **O&M after project implementation** | | |
| Water | Waste water | Total | Water | Waste water | Total |
| Total O&M cost | MKD per year |  |  |  |  |  |  |
| - Of which for energy | MKD per year |  |  |  |  |  |  |
| -Of which staff | MKD per year |  |  |  |  |  |  |
| Specific power consumption | kWh  per m3  treated |  |  | \_\_ |  |  | n.a. |
| Specific O&M cost | MKD  per m3  treated |  |  | \_\_ |  |  | n.a. |
| Staff | N° |  |  |  |  |  |  |
| Vehicles for maintenance | N° |  |  |  |  |  |  |

## Water Tariffs

### Current fixed component independent from consumption

* Indicate the component that is billed for the provision of service (such as a charge per meter, per connection, per capita, per property) or on any other basis (such as debt repayment fee) and that has nothing to do with the consumption. Do not confuse with lump sum billing (see 2.14.2)
* Where relevant distinguish for water and waste water and further to categories, such as user groups (domestic, commercial, etc.), meter diameter, etc.
* Indicate the relevant amount(s) with the frequency of billing (monthly, quarterly, yearly, etc.)
* If there is no independent fixed component please indicate “n.a.” (not applicable)

### Current fixed component for consumption (“lump sum”)

* In case there are no customer meters, customers might be billed on the basis of a lump sum. In case only a part of customer is billed that way, please indicate their number or the percentage of total.
* Where relevant distinguish for water and waste water and further to categories, such as user groups (domestic, commercial, etc.), meter diameter, etc.
* Indicate the relevant amount(s) with the frequency of billing (monthly, quarterly, yearly, etc.).
* If there is no fixed “lump sum” component please indicate “n.a.” (not applicable).

### Current volume related component

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Basis | Domestic | Commercial | Other |
| (A) Water component | *Metered м3* |  |  |  |
| (B) Wastewater component |  |  |  |  |
| Tax 1: |  |  |  |  |
| Tax 2: |  |  |  |  |
| Tax 3: |  |  |  |  |
| TOTAL TARIFF per CUBIC METER excl. VAT |  |  |  |  |
| VAT |  |  |  |  |
| **TOTAL TARIFF per CUBIC METER** |  |  |  |  |

* Where relevant distinguish further to categories, such as user groups (domestic, commercial, etc.), volume related tariff groups, etc.
* Please indicate all applicable taxes (such abstraction tax, pollution tax, water fund, waste water fund, etc.) .
* Please indicate for all taxes as well as for VAT the calculation basis (such xx MKD/m³ or xx % of A, B or A+B, etc).
* Indicate the relevant amount(s) and or percentages with the frequency of billing (monthly, quarterly, yearly, etc.).

### Tariff evolution

Describe the required and the planned evolution of tariffs over the next few years, as well as the date of approval of current tariff scheme. In case water or waste water infrastructure is created in a village or town where there was no such infrastructure before, the calculation of tariffs required to recover at least the O&M cost given in 2.13 is mandatory.

## Subproject indicators

Please select the relevant indicators

### Water Supply

|  |  |
| --- | --- |
| Capacity of water treatment plant constructed | m³/day |
| Capacity of water treatment plant rehabilitated | m³/day |
| Capacity of reservoirs or raw water storage constructed (new or extension) | m3 |
| Capacity of reservoirs or raw water storage rehabilitated | m3 |
| Length of water mains or distribution pipes installed | km |
| Length of water mains or distribution pipes rehabilitated | km |
| House connections created | nr |
| House connections rehabilitated | nr |
| Population benefiting from safe drinking water | inhabitants |
| Energy consumption water supply | kWh/m³ |
| Non-revenue water | % |
| Service level | % |

### Wastewater

|  |  |
| --- | --- |
| Capacity of sewage treatment plant constructed | p.e |
| Capacity of sewage treatment plant rehabilitated | p.e |
| Length of sewers installed | km |
| Length of sewers rehabilitated | km |
| Length of combined collectors (wastewater + stormwater) installed | km |
| Length of combined collectors (wastewater + stormwater) rehabilitated | km |
| Connections to sanitation services created | nr |
| Connections to sanitation services rehabilitated | nr |
| Population benefiting from sanitation services | inhabitants |
| Energy consumption sewage | kWh/m³ |

### Storm water, flood protection

|  |  |
| --- | --- |
| Capacity of retention structures rehabilitated | m3 |
| Capacity of room-for-river areas constructed or created | ha |
| Length of dykes constructed | km |
| Length of dykes rehabilitated | km |
| Length of storm water drains installed | km |
| Length of storm water drains rehabilitated | km |

## Cash Flow of Utility

Provide summary breakdown of budget for the operator (typically the PUC), showing different sources of income and operational and capital expenditure, including for the non-water and sanitation sectors and transfers from/to the municipality A business plan can also serve for the above purpose. The data should cover ideally the 3 past years plus the 3 coming years (i.e. including the effects of the project).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **According to final account** | | | **Planned** | | | | | |
|  | 2020 | 2021 | 2022 | 2023 | | 2024 | | 2025 | |
| **Revenues** |  |  |  |  | |  | |  | |
| 1 Water supply |  |  |  |  | |  | |  | |
| 2 Sewage |  |  |  |  | |  | |  | |
| 3 Other (1) |  |  |  |  | |  | |  | |
| 4 Transfers from Municipality |  |  |  |  | |  | |  | |
| **Total revenues:** |  |  |  |  | |  | |  | |
|  | **According to final account** | | | **Planned** | | | | | |
|  | 2020 | 2021 | 2022 | 2023 | 2024 | | 2025 | |
| **Expenditures** |  |  |  |  |  | |  | |
| 1 Water supply |  |  |  |  |  | |  | |
| *1а. Operative* |  |  |  |  |  | |  | |
| *1b. Capital* |  |  |  |  |  | |  | |
| 2. Sewage |  |  |  |  |  | |  | |
| *2а. Operative* |  |  |  |  |  | |  | |
| *2b. Capital* |  |  |  |  |  | |  | |
| 3. Other |  |  |  |  |  | |  | |
| *3а. Operative* |  |  |  |  |  | |  | |
| *3b. Capital* |  |  |  |  |  | |  | |
| 4. Transfers from JCE to Municipality |  |  |  |  |  | |  | |
| **Total expenditures:** |  |  |  |  |  | |  | |

(1) PCE Services such: waste collection, services for the funerals, market taxes etc.

## Economic cost-benefit analysis

For capital investment projects with a cost of more than EUR 5 million equivalent, the economic viability of the project should be demonstrated through an economic cost-benefit analysis covering the construction period plus an operations period of at least 25 years (including estimates of economic rate of return and economic net present value). The projected economic cost and benefit streams should reflect data provided in previous sections. Figures should be in constant prices, and should include details of the various costs and benefits.

## Financial sustainability analysis

For capital investment projects with a cost of more than EUR 5 million equivalent, the financial sustainability of the project should be demonstrated through a cashflow analysis covering the construction period plus an operations period of at least 25 years (including estimates of financial rate of return and financial net present value). The cash flow projections should reflect data provided in previous sections. Figures should be in constant prices, and should include details of the various revenue sources and operational and capital (including replacement) expenditures.

## Affordability analysis

For capital investment projects with a cost of more than EUR 5 million equivalent, the affordability of water supply and/or wastewater services should be demonstrated by estimating the average water supply and/or wastewater bill of a low-income household in the service area of the operator as a percentage of the expenditure budget of a low-income household, and compare this percentage with the official affordability limit (in case there is no official affordability limit, the internationally accepted limit of 3% applies to water supply services, and 2% to wastewater services).

All assumptions should be clearly stated and justified. Feasibility Study can be submitted to justify these assumptions.

At project completion, the Borrower shall ensure that Promoter / Final Beneficiaries will be able to charge tariffs within affordability limits that cover the full O&M cost for all water supply and wastewater services and depreciation charges for existing assets;

At project completion, the Promoter shall demonstrate that he has taken effective measures to improve commercial and technical performance

\* \* \*