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QUESTIONNAIRE ON BILATERAL AND INTERNATIONAL ASSISTANCE PROGRAMME
TO TRANSITION COUNTRIES IN THE FIELD OF ENERGY

Prepared by the secretariat

1. At the fourth session of the Committee on Energy, a note was presented summarizing responses of transition countries to a questionnaire concerning the "Survey of projects designed to assist countries in transition in the field of energy", ENERGY/R.97/Add.1. The Committee requested the secretariat to make a new survey and to present the results in a note for the fifth session (para. 81 of ECE/ENERGY/26).

2. The questionnaire covered both bilateral assistance and international assistance programmes. It is noted that information provided by donor countries on their technical assistance projects to countries in transition in the energy field is already available in the form of The Registry of the International Energy Agency and that information concerning this Registry may be obtained from the Energy Statistics Division, OECD/IEA.

3. The questionnaire asked for summary information by project title concerning the following items: (a) location; (b) bilateral donor country or international organization providing project finance; (c) cost; (d) technology; and (e) result expected. Four countries provided information to this year's survey: Armenia, Belarus, Slovakia and Slovenia. The response of Armenia is provided in an annex to this note as a country case example.

4. The projects reported on "sectoral aid" (including studies, energy assessments, market studies, workshops, visits by experts, and pilot projects) and technical cooperation and investment including both modernization of existing facilities and construction of new infrastructures. For the projects grouped into sectoral aid and technical cooperation on the one hand and direct investment categories on the other, the following picture emerges for the four countries aggregating the reported costs for identified ongoing projects:

Sectoral aid and technical cooperation projects

5. Eighty-five projects with identified costs financed by countries/international institutions of about \$75 million, excluding one project of \$5 million expected to be finalized this year and financed through a loan from an international lending institution. Project financing was provided by the following countries/international institutions: Austria, Canada, France, Japan, Netherlands, United Kingdom of Great Britain and Northern Ireland, United States of America, European Union, European Bank for Reconstruction and Development (EBRD), International Bank for Reconstruction and Development (IBRD), and the World Bank.

Direct investment projects

6. Eight projects with identified costs of about \$107 million, with financing from international lending institutions, Aznavour pour l'Armenie & Energie pour Armenie.

7. The projects are as follows by country:

Armenia

8. Forty-seven projects are identified, including four infrastructure projects. Within the area of sectoral aid and technical cooperation projects, there is a broad variety of projects and these are cited in the note "Energy Projects Survey", prepared by the Ministry of Energy and Fuel of Armenia and annexed to this note as a country case example. Financing for the projects is provided by the United States; Aznavour pour l'Armenie & Energie pour Armenie; European Union and the World Bank.

Belarus

9. Two projects are identified covering the areas of studies and training with EU financing provided.

Slovakia

10. Ten projects are identified, including infrastructure improvements, a feasibility/financial studies, training, and an environmental impact study. Financing is provided by Canada, France, the United Kingdom, the United States, EBRD and IBRD.

Slovenia

11. Thirty-four projects are identified, including technical/economic/legal/feasibilities studies, a legal drafting project in the energy area, training programmes, consultancies in the energy sector, energy/environmental programmes and projects. The direct investment projects include the refurbishing of hydropower stations and the extension of the gas distribution network. Financing is provided by Austria, the Netherlands, EBRD, EU, and the World Bank.

Annex

ENERGY PROJECTS SURVEY*

* Prepared by the Ministry of Energy and Fuel, Armenia, June 1995.

1. Project title: Armenian Nuclear Power Plant Safety Evaluation
 - (a) location: Medzamor, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 293,238 ECUs
 - (d) technology: nuclear
 - (e) result expected: Recommissioning of Armenian Nuclear Power Plant
2. Project title: Assistance for a National Energy Saving Strategy
 - (a) location: Yerevan, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 484,475 ECUs
 - (d) technology
 - (e) result expected: Creation of energy saving policy
3. Project title: Advice to Government on feasibility of pipeline link,
assessment of financial risk (Iran gas pipeline)
 - (a) location: Yerevan, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 25,000 ECUs
 - (d) technology:
 - (e) result expected: Construction of gas pipeline
4. Project title: Creation of an Energy Centre for Armenia
 - (a) location: Yerevan, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 500,000 ECUs
 - (d) technology:
 - (e) result expected: Energy saving measures
5. Project title: Evaluation of Armenia's Potential Hydrocarbon Deposits
 - (a) location: Yerevan, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 500,000 ECUs
 - (d) technology:
 - (e) result expected: Use of own natural resources
6. Project title: Advice to Government of Armenia
 - (a) location: Yerevan, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS

- (c) cost: 500,000 ECUs
 - (d) technology:
 - (e) result expected: Development of energy strategy
7. Project title: Rehabilitation of Mini Hydro Generating Stations
- (a) location: Yerevan, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 120,000 ECUs
 - (d) technology: Consultation, equipment, spare parts
 - (e) result expected: Modernization of stations
8. Project title: Optimization of the Abovian Underground Storage Facility
- (a) location: Abovian, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 149,600 ECUs
 - (d) technology:
 - (e) result expected: Efficiency measures
9. Project title: Construction of Hydro Power Stations at Debed
- (a) location: Debed River, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 100,000 ECUs
 - (d) technology:
 - (e) result expected: Increase of energy potential
10. Project title: Mazut Delivery
- (a) location: Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 8 million ECUs
 - (d) technology:
 - (e) result expected: As a fuel for thermal power plants
11. Project title: Extension of Assistance to the Government of Armenia with
the Implementation of a National Energy Conservation
Program
- (a) location: Yerevan, Armenia
 - (b) international organization
providing project finance: European Commission/TACIS
 - (c) cost: 1,100,000 ECUs
 - (d) technology:
 - (e) result expected: Energy conservation measures in industry

12. Project title: Technical Support for the Development of the Gas Industry in Armenia
 - (a) location: Armenia
 - (b) international organization providing project finance: European Commission/TACIS
 - (c) cost: 1,900,000 ECUs
 - (d) technology:
 - (e) result expected: Improvement of the gas sector
13. Project title: Regional Oil and Gas Pipeline Management
 - (a) location: Armenia
 - (b) international organization providing project finance: European Commission/TACIS
 - (c) cost: 1,500,000 ECUs
 - (d) technology:
 - (e) result expected: Improvement of the regional system integration
14. Project title: Improvement of the System Operational Planning, Operation and Control Practices in Central Asia and Caucasus
 - (a) location: Armenia
 - (b) international organization providing project finance: European Commission/TACIS
 - (c) cost: 1,100,000 ECUs
 - (d) technology:
 - (e) result expected: Interrelationship practices
15. Project title: Common Technical and Organizational Requirements for Extended Security and Economy of Power Systems Operation in all NIS
 - (a) location: Armenia
 - (b) international organization providing project finance: European Commission/TACIS
 - (c) cost: 1,650,000 ECUs
 - (d) technology:
 - (e) result expected: Interrelationship practices
16. Project title: Development Planning in the Armenian Power Subsector
 - (a) location: Armenia
 - (b) international organization providing project finance: European Commission/EBRD
 - (c) cost:
 - (d) technology:
 - (e) result expected: Recommendations on the power subsector

17. Project title: Financial System and Planning in the Armenian Power Subsector

- (a) location: Armenia
- (b) international organization
providing project finance: European Commission/EBRD
- (c) cost:
- (d) technology:
- (e) result expected: Application of western financial methods

18. Project title: Fuel Supply Contracting Assistance

- (a) location: Armenia
- (b) international organization
providing project finance: European Commission/EBRD
- (c) cost: 53,000 ECUs
- (d) technology:
- (e) result expected: Proper contracting methods

19. Project title: Rehabilitation of Hydro Power Plants

- (a) location: Armenia
- (b) international organization
providing project finance: Aznavour pour l'Armenie and
Energie pour l'Armenie
- (c) cost: US\$ 328,000
- (d) technology:
- (e) result expected: Increase potential of energy resources

20. Project title: Pre-loan for Hrazdan TPP - Energy supply options - Coal sector study - Armoil service contract

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/Bechtel
- (c) cost: US\$ 950,000
- (d) technology:
- (e) result expected: Support for the energy sector

21. Project title: Privatization - Thermal Power Cogeneration

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/K & M Engineering
- (c) cost: US\$ 460,000
- (d) technology:
- (e) result expected: Institutional reform and assessment of
potentiality

22. Project title: Coal Sector Review
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/US Geological Survey
 - (c) cost: US\$ 249,980
 - (d) technology:
 - (e) result expected: Hydrocarbon deposit study
23. Project title: Accelerated program - District heating - Hydro turbine equipment procurement
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/RMA
 - (c) cost: US\$ 2,874,328
 - (d) technology:
 - (e) result expected: Energy saving and efficiency
24. Project title: Exchange programs
- (a) location: United States
 - (b) international organization
providing project finance: USAID/USEA
 - (c) cost: US\$ 200,000
 - (d) technology: Advanced training
 - (e) result expected: Specialization
25. Project title: Armoil project
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID
 - (c) cost: US\$ 2,000,000
 - (d) technology:
 - (e) result expected: Discovery of oil and gas
26. Project title: Energy Projects Support Office
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/IDEA
 - (c) cost: US\$ 275,000
 - (d) technology:
 - (e) result expected: Office set-up
27. Project title: Mini-Hydro Turbine/Generator Procurement
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/Burns & Roe

- (c) cost: US\$ 920,000
- (d) technology:
- (e) result expected: Replacement of equipment

28. Project title: Critical Commodities Purchasing

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/Burns & Roe
- (c) cost: US\$ 6,280,000
- (d) technology:
- (e) result expected: 94-95 winter preparation

29. Project title: Fast Track Coal Mining

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/Burns & Roe
- (c) cost: US\$ 1,238,000
- (d) technology:
- (e) result expected: Excavation of coal at Djadjur

30. Project title: Hydro Feasibility Rehabilitation

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/Burns & Roe
- (c) cost: US\$ 2,940,000
- (d) technology:
- (e) result expected: Pre-loan feasibility study

31. Project title: Industrial Energy Conservation

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/Burns & Roe/RMA
- (c) cost: US\$ 2,259,000
- (d) technology:
- (e) result expected: Energy efficiency

32. Project title: Oil and Gas Drilling

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/Burns & Roe
- (c) cost: US\$ 2,849,000
- (d) technology:
- (e) result expected: Discovery of oil and gas

33. Project title: Weatherization
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/Burns & Roe/RMA
 - (c) cost: US\$ 1,740,000
 - (d) technology:
 - (e) result expected: Energy saving
34. Project title: Inventory Management
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/Burns & Roe/Hill Int'l
 - (c) cost: US\$ 169,000
 - (d) technology:
 - (e) result expected: Management efficiency
35. Project title: Independent Private Power
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID
 - (c) cost: US\$ 550,000
 - (d) technology:
 - (e) result expected: Development of a private power sector
36. Project title: Management Information System
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/Hagler Bailly
 - (c) cost: US\$ 750,000
 - (d) technology:
 - (e) result expected: Implementation of local area network
37. Project title: Regulatory and Legislative Reform
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/Hagler Bailly
 - (c) cost: US\$ 950,000
 - (d) technology:
 - (e) result expected: Institutional reform
38. Project title: Utility Corporatization
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/Hagler Bailly

- (c) cost: US\$ 875,000
- (d) technology:
- (e) result expected: Privatization

39. Project title: Restructuring

- (a) location: Armenia
- (b) international organization
providing project finance: USAID
- (c) cost: US\$ 585,000
- (d) technology:
- (e) result expected: Structural reform

40. Project title: Energy Partnership Program

- (a) location: United States
- (b) international organization
providing project finance: USAID/USEA
- (c) cost: US\$ 488,000
- (d) technology:
- (e) result expected: Specialization

41. Project title: Coal Exploration and Development

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/US Geological Survey
- (c) cost: US\$ 3,200,000
- (d) technology:
- (e) result expected: Hydrocarbon exploration

42. Project title: In-Country Training

- (a) location: Armenia
- (b) international organization
providing project finance: USAID/Institute of International
Education
- (c) cost: US\$ 950,000
- (d) technology: Advanced training
- (e) result expected: Specialization

43. Project title: Alternative Energy

- (a) location: Armenia
- (b) international organization
providing project finance: USAID
- (c) cost: US\$ 767,000
- (d) technology:
- (e) result expected: Renewable resources development

44. Project title: Yerevan Electric and Gas Distribution Maintenance
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/Burns & Roe
 - (c) cost: US\$ 1,100,000
 - (d) technology:
 - (e) result expected: System efficiency
45. Project title: Geothermal Energy Development
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/US Geological Survey/Burns &
Roe/NREL
 - (c) cost: US\$ 500,000
 - (d) technology:
 - (e) result expected: Obtaining geothermal resources
46. Project title: District Heating Rehabilitation
- (a) location: Armenia
 - (b) international organization
providing project finance: USAID/Burns & Roe/RMA
 - (c) cost: US\$ 750,000
 - (d) technology:
 - (e) result expected: Development strategy
47. Project title: Power Maintenance Project
- (a) location: Armenia
 - (b) international organization
providing project finance: World Bank
 - (c) cost: US\$ 13,700,000
 - (d) technology:
 - (e) result expected: Rehabilitation of the power sector.
