National Report to the Third Session of the
United Nations Forum on Forests

Czech Republic

31.1.2003

I. Key Contacts
Head of Forestry in the Czech Republic:

Name: Jaromír VAŠÍČEK
Title: Deputy Minister for Forestry

Contact information:
Address: Ministry of Agriculture, Těšnov 17, 117 05 Prague 1, (the) Czech Republic
Phone: +420 2 2181 2225
Fax: +420 2 2231 2706
E-mail: vasicek@mze.cz

UNFF national focal point for the Czech Republic:

Name: Tomáš KREJZAR
Title: Forestry Officer

Contact information:
Address: Forestry Development Department, Ministry of Agriculture, Těšnov 17, 117 05 Prague 1, (the) Czech Republic
Phone: +420 2 2181 2677
Fax: +420 2 2181 2988
E-mail: krejzar@mze.cz

Person to contact concerning the national report, if other than the UNFF national focal point:

Name: Tomáš KREJZAR
Title: Forestry Officer
Name: Tomáš STANĚK
Title: Head of Department

Contact information:
Address: Forestry Development Department, Ministry of Agriculture, Těšnov 17, 117 05 Prague 1, (the) Czech Republic
Address: Forest Protection Department, Ministry of Environment, Vršovická 65, 100 10 Prague 1, (the) Czech Republic
Phone: +420 2 2181 2677
Phone: +420 2 6712 2038
Fax: +420 2 2181 2988
Fax: +420 2 6712 6038
E-mail: krejzar@mze.cz
E-mail: tomas_stanek@env.cz

II. Progress and issues related to implementation of IPF/IFF proposals for action
General

1. Please provide additional or new information on initiatives taken or lessons learned further to the information on forests included in your national reports to the Commission on Sustainable Development on the following points:
   - assessment (including of the relevance, priority, status of implementation, planned actions) of the IPF/IFF proposals for action in the national context
   - development and implementation of your national forest programme or similar national policy framework for forests, and
   - mechanisms or initiatives to facilitate stakeholder participation in forest sector planning, decision-making and/or forest management.

National Forest Programme

History of preparation

According to the 5th chapter of the Conception of the Forestry Policy, which was adopted by the Resolution of the Government of the Czech Republic in January, 2000, the National Forest Programme (NFP) is considered as a system of implementing projects of the State Forestry Policy. Therefore, the target of NFP is to analyze selected problems identified in the course of working out of the Conception and proposing appropriate solutions.

The Forestry and Game Management Research Institute was charged with preparing a draft of the NFP. For that purpose six working groups were established to deal with the following subjects:
- silviculture in compliance with principles of sustainable forest management,
- development of non-wood-producing functions of the forest,
- enhancement of biological diversity,
- wood production and utilization,
- forests in specially protected areas,
- forest protection.

The group of authors included distinguished personalities representing research institutes, universities, state forests, national parks, large-scale protected areas and professional associations (10 persons). The steering board consisted of the representatives of the Ministry of Agriculture, Ministry of Environment, Forestry Faculties, Forestry and Game Management Research Institute and the state enterprise "Forests of the Czech Republic" (7 persons).

The draft of the NFP was submitted to and discussed with various stakeholders (altogether 35 organizations) comprising state-forest enterprises, relevant universities, forestry technical schools, research institutes, nature protection administration bodies (including representatives of national parks and large-scale protected areas), associations of forest owners and workers in forestry and various non-governmental organizations, plus all ministries. The NFP had been submitted to the Government of the Czech Republic jointly by the Ministry of Agriculture and the Ministry of Environment in the end of 2002 and was approved by the Government in January 2003.

Outlook for future

The NFP of the Czech Republic will respect the common approach of European countries to the NFPs, namely these elements and principles: participation, holistic and intersectoral approach, iterative process with long term commitment, capacity building, consistency with national policies, integration with national sustainable development strategies, consistency with international commitments recognising synergies between international forest related initiatives and conventions, ecosystem approach, partnership for implementation and raising awareness.

The current wording of the NFP has been adopted for the period 2003-2006. After its expiration the NFP is intended to be updated based on the information and findings gained from various forest-related stakeholders as a feedback. That is why it is vitally needed to maintain and develop the net of
stakeholders-respondents, e.g. through the elaboration of the voluntary country reports for UNFF on
the implementation of IPF/IFF Proposals for Action.

In this report, the relevant programme provisions formulated in the NFP are always cited
in the end of individual chapters (see below).

Economic aspects of forests, including trade

2. Please provide information on: i) activities undertaken in your country, ii) progress made, iii)
   lessons learned, iv) constraints encountered (including those related to financing, transfer of
   environmentally sound technologies, and needs for capacity-building) and v) initiatives planned and
   vi) the role of enhanced cooperation and policy and programme coordination to facilitate progress in:
   - valuation of forest goods and services (this may include, among other things, the development and
     use of new valuation methodologies, valuation of a wider range of goods and services, and policy
     decisions that reflect a more comprehensive assessment of forest values)
   - the amount, scope, or quality of market data and information for wood and non-wood forest
     products and their substitutes
   - use of economic and policy instruments to facilitate progress toward sustainable forest
     management (these may include improved tax policies and forest revenue collection systems)

3. Please provide information on i) initiatives taken, ii) progress made, iii) lessons learned, iv)
   constraints encountered (including those related to financing, transfer of environmentally sound
   technologies, and needs for capacity-building) and v) initiatives planned, and vi) the role of enhanced
   cooperation and policy and programme coordination to facilitate progress related to trade in forest products or environmental services (e.g. carbon trading), including in:
   - efforts to reduce negative impacts of trade,
   - participation in forest certification and labeling schemes and work toward mutual recognition and
     comparability of such schemes, and
   - efforts to reduce illegal trade (exports from or imports into your country) in wood or non-wood
     forest products. Please indicate achievements made, lessons learned, constraints encountered, and
     planned initiatives.

Evaluation of all-society forest functions

Over the past ten years there have been at least two
research projects focusing on the development of a method for assessment and evaluation of non-
wood-producing (all-society) function of forests. Nevertheless their application in practice is still
limited. One of them is based on the real demands from the society. The second one, which assesses
the forest as a forest ecosystem according to the extent of its ability to fulfil important functions, has
already been used for the estimation of the damage to environment caused by illegal fellings. But a
real valuation of various socio-economic functions of the forests e.g. in terms of additional income to
forest owners is still far away.

Data and information on prices and markets for forest products

Certain data on the
production and consumption of forests products (especially timber - roundwood, wood-based panels,
wood pulp, paper and paperboards) and their prices are subject to the obligation of recording and
reporting to the Czech Statistical Office. Data on imports and exports can be find out in the customs
statistics. These databases are freely accessible for public at Internet. The unified database
summarizing the data on forestry and forest products from various sources, enabling their effective
processing and flexible international exchange is under preparation. Prices of forests products are
monthly published by forestry journals. The Czech Republic actively co-operates within the structures
of UN ECE and FAO. The Ministry of Agriculture elaborates requested questionnaires and the market
statements of the Czech Republic for the yearly sessions of UN ECE Timber Committee. The
statement describes developments in forest products market sectors (roundwood, softwood -
sawnwood and logs, hardwood - sawnwood and logs, wood-based panels and certified forest products)
in terms of production, consumption, imports and exports. Basic information on forest products
markets can also be find in the Report on the State of Forests and Forestry in the Czech Republic (published yearly by the Ministry of Agriculture).

**Economic and policy instruments** The main practical tools for the implementation of the state forest policy (which has been formulated in the National Forest Programme and earlier approved documents such as the State Policy of Environment and the Conception of Forestry Policy) are so-called Regional Plans of Forest Development at the forest management planning level and aids from the state budget as an economic instrument.

Based on the principles of sustainable forest management, the Regional Plans of Forest Development should create grounds for minimizing potential conflicts between the public and private owners’ interests. Including the whole traditional scale of specialized surveys of the natural and social conditions, the Regional Plan of Forest Development is a source of information and a set of optimized recommendations for forest management planning, i.e. for the elaboration of forest management plans and forest management guidelines. Regional Plans of Forest Development are prepared for 41 Natural Forest Areas characterized by certain homogeneity of natural conditions, whereas forest management plans and forest management guidelines are made for individual forest management units. Note that, as a set of recommendations, Regional Plans of Forest Development are not obligatory.

**Aids from the state budget** were about 32 mill. EUR in 2001, that means the total volume of funds for the forestry sector dropped in comparison with the previous year. Optional aids fell by 37%, while subsidies for afforestation of agricultural land rose by 30%. Nevertheless the system of aids is well-established and consists of the state commitments under the Forest Act (soil reclamation and torrent control, costs of licenced forest manager, financing of forest management guidelines), subsidies for forest owners (reforestation, establishment and tending of forest stands, safeguarding of non-wood-producing functions of forest, financing of forest management plans, torrent control and reconstruction of forests damaged by air pollution), services for forest owners (aerial liming and fertilizing, airborne fire control service), aids for afforestation of agricultural lands, aids covering interests of credits in forestry, aids for forestry management in military forests and aids from the State Environmental Fund.

**Tax policies** Exemption from real-estate tax is applied to protection forests, special purpose forests and the production forests affected by air pollution ranking in the first two highest danger zones. Forests affected by air pollution are ranked in one of four danger zones. The danger zones are defined by a special regulation of the Ministry of Agriculture.

**Participation in forest certification and labeling schemes and work toward mutual recognition and comparability of such schemes** The Czech Republic is a member of the Pan-European Forest Certification (PEFC) scheme since 2001. Sustainable forest management and custody chains can be certified. Regional organizations on behalf of individual forest owners can apply for certification (regional certification). A third party (independent expert body accredited in compliance with the European and Czech PEFC standards) carries out the certification. The Czech system was approved by the Pan-European Forest Certification Council. This enables the subjects respecting the criteria set by this organization to use the common logo of PEFC. Recently, 366 applications from owners managing more than 1,750,000 hectares have been endorsed. These owners have already been awarded a confirmation of participation in forest certification. Currently another 68 forest owners representing 50,000 hectares of forestland are undergoing the certification process. Further applicants are awaited following the accreditation of the process of Chains of Custody certification. Another certification system - FSC, which is promoted mainly by non-governmental environmental organizations, might become an alternative to PEFC. It is only up to forest owners themselves which system they decide to join.

**Illegal trade and illegal fellings** As for the illegal trade at international level, the Czech Republic is more less self-sufficient in the supply of timber and the imports of timber from others than EU and CEFTA countries (i.e. not only from developing ones) are almost negligible (only about 27,000 m³ in 2001). The issue of illegal fellings is of more importance in the Czech Republic. The annual amount of illegally felled timber, according to the findings of the state forest administration and the Czech Environmental Inspection, does not exceed 1% of the total fellings in the Czech Republic. Since 1999, when 720 cases and 152,400 m³ of illegally felled timber was recorded, both the
number of cases and volume of illegally felled timber has slightly been decreasing. In 2000 the amendment to the forest act was approved (in force since April 2000). This amendment extended the notification duty for persons who intend to carry out fellings, tightened up sanctions against illegal fellings and also added new merits concerning illegal fellings in the Forest Act. On the other hand, it should be stressed that certain essential prerequisites for the fight against illegal fellings are lying outside the forestry sector itself and depend on the efficiency of the whole system of law, including an administrative procedure.

Carbon trading In 1990's we succeeded in stabilizing the emissions of CO\(_2\) at the level lower by 25% compared with the reference level from 1990. That means the Czech Republic is one of a few OECD countries which has no problem with the reduction of the emissions of CO\(_2\) according to the Kjoto Protocol (commitment to achieve 8% reduction by the period 2008-2012). Despite of this optimistic trend there has been no attempt to "trade in carbon" so far.

The National Forest Programme of the Czech Republic has proposed the following programme provisions:

(1) Assessment and valuation of various forest functions

- to complete the elaboration of systems of assessment of forest functions based on the independent examination of proposed methods and to specify the legal framework for their utilization,
- to elaborate the quantification of individual functional potentials in concrete conditions of different forest types,
- to solve the system of criteria and indicators of multifunctional (functionally integrated and functionally diferenciated) forest management,
- to create a recommended optimzed system of multifunctional forest management,
- to propose a new system of forest classification.

(2) Production and utilization of wood

- to promote the principles of sustainable forest management, which safeguard sustainability and safety of productive and non-productive effects of the forest and to reassess the forest law with respect to its role in attainment of this aim,
- to examine thoroughly and consistently requests for the exemption of further forests from the category of production forests to the categories, where the productive function is restricted,
- to find a scientific solution of the optimalization and utilization of the potential productive ability of forests,
- to reassess the system of supports to the owners of agricultural land that is permanently uncultivated for its afforestation with respect to simplification of its transfer to the forest land fund, to reassess requirements on afforestation projects and to consider preferential credit terms etc.,
- to promote building and modernizing of the capacity for effective finalization of timber production and processing, to enhance this issue in the Conception of Industrial Policy of the Czech Republic and in its sections,
- to elaborate the document (by the Ministry of Industry and Trade) called „Raw Material Policy - Renewable Resources“ focuing on wood and some agricultural crops, which would suplement the respective document aiming at unrenewable resources,
- to support the utilization of liquid capital in the hands of major domestic forest holdings for building modern wood-processing capacities,
- to co-ordinate and promote the co-operation among forest and wood-processing associations in order to enhance popularization of the use of wood and products made of it,
• to promote internationally recognized systems of forest certification (including chains of custody), whose costs do not exceed acceptable level, which do not create discriminatory obstacles to free business and respect the demanding forest law of the Czech Republic, whose observing guarantees the sustainable management of forests,

• to reassess possibilities how to contribute to the solution of the issue of power supply in the Czech Republic through the supply of lower-quality wood and waste,

• to evaluate prerequisites and possibilities to increase wood production through the cultivation of fast-growing species as plantations on agricultural lands and on the land recultivated after the mining of coal, which is supported within the frame of the State Programme for the Promotion of Savings of Energy and Utilization of Renewable Resources of Energy.

Forest health and productivity

4. If damage to forests from air pollution is a significant problem in your country, please provide information on recent national strategies or programmes to minimize damaging air pollution. Please indicate if your country is involved in any international cooperation efforts aimed at strengthening scientific knowledge, increasing information access or reducing the impacts of long-range air pollution on forests, as well as your views on the role of enhanced cooperation at the regional and international levels to facilitate such work.

Potential risks Fragmentation and changed species composition could potentially weakened ecological stability of forests. Other major risk are an long-term adverse effect of air pollution and depositions of pollutants on the forest, which could interact together with a possible impact of climate change. The damage caused to forest stands by hoofed game remains to be the chronic problem of forest protection.

Reduction of damaging air pollution According to the Report on the State of Environment in the Czech Republic, the quality of atmosphere have been stable over the past 10 years. During the period from 1990 to 1993, the emissions of most air-polluting substances dramatically decreased due to the restructurization of industry and since than remain at the stable level. Apart from the partial collapse of the industry at the beginning of 1990's, the desulphurization of thermal power plants, the expansion of the utilization of exhaust-gas calalysts and the ban on using the leaded fuel substantially contributed to this positive trend. We also succeeded in the reduction of the emissions of greenhouse gases and heavy metals. Nevertheless simply this reduction of damaging air-pollution have not lead to the improvement of the healthy status of affected forests stands.

Forest health condition and liming of forests The condition of forest stands and forest soil, mainly in borderline mountain areas of the Czech Republic, heavily deteriorated during the period of a massive air pollution lasting for several decades from the beginning of the second half of the 20th century. A considerable part of damaged forests had to be prematurely felled and regenerated. In the period of 1999-2000 the state of forest stands in some parts of borderline mountains got rapidly worse and a considerable shortage of magnesium and calcium was found in needles and forest soil. The Resolution of the Government of the Czech Republic No. 532 of May 31, 2000 obliged the Ministry of Agriculture to provide 2.6 million EUR for liming and fertilization of forests in borderline mountains with the aim of improving chemical properties of forest soil. In 2001 liming was carried out over an area of more than 8,000 ha.

Scientific knowledge and information access Scientific projects and research programmes concentrate on the areas heavily damaged by air pollution especially on the Krušně Hory Mts. and Orlické Hory Mts. (borderline mountain area). They are focused namely on the following issues: vitality of existing forest stands of substitutional forest tree species, dieback of various forest tree species, damage caused to forest soils by anthropogenic factors, liming of forests stands, regeneration methods on extreme cleared areas, current air-pollution load, genetics of forest stands and
reconstructions of forest stands of substitutional tree species. The research is carried out by several research organizations including the Forestry and Game Management Research Institute, the Forestry Faculty of the Czech Agricultural University, the Forestry Faculty of the Mendel University of Agricultural and Forestry etc. Research projects are co-financed by the Ministry of Agriculture and by the Ministry of Environment.

The main sources of information concerning the healthy status of forests, air-pollution damage and generally the state of environment are the Report on the State of Forests and Forestry in the Czech Republic (published yearly by the Ministry of Agriculture) and Report on the Environment in the Czech Republic (published by the Ministry of Environment). These data are also available on Internet.

**National and regional programmes for monitoring air-pollution** The Czech Republic is a member of the International Co-operative Programme on the Assessment and Monitoring of Air-pollution Effects on Forests (ICP Forests) which was established in 1985 under the UN ECE Convention on Long-range Transboundary Air-pollution (CLRTAP). The forest health status is assessed at the Level I plots since 1986. Today regular assessment is carried out at 100 plots of the international network 16x16 km, and at chosen 200 plots of the national network of 8x8 km grid, schematically distributed within the Czech Republic by density of forests. The plots were chosen to characterize site and stand conditions. At the elevation from 150 to 1,300 m above sea level more than 14,000 trees are assessed, reprezenting 28 forest tree species of different age classes. Special assessment of the crown condition (defoliation, discoloration etc.), social status, dendrometric parameters and phytocenose observation are carried out in regular intervals. As supportive, irregular assessment, also foliage, soil and tree ring analyses are carried out. At Level II, besides crown condition, soil condition (10-year interval) and nutritional status of trees (2-year interval), increments and ground vegetation (both in 5-year interval), and at selected plots depositions, soil solution and meteorological parameters are assessed and analysed.

**The National Forest Programme of the Czech Republic has proposed the following programme provisions against the effects of identified adverse factors:**

- to approve and realize a Conception of Game Management Policy in the Czech Republic, solely based on the ecosystem approach as a principal prerequisite for the further development of sustainable forest management,
- to elaborate and codify a new methodology of the calculation of the damage caused by air pollution to forest stands,
- to enhance a legal responsibility of subjects in the field of industry, transportation and power supply for threatening forest stands by the emissions of compounds polluting air, water and soil, and to specify their obligation to take part in the process of providing compensations for the damage resulting from the lowering of productivity of the forest holdings of all ownership categories, namely in compliance with the EU regulations, which are now under preparation; to solve completely the system of compensations for air pollution damage, which the forest owners should be provided with,
- to prepare a regulation of the Ministry of Agriculture on the determination of zones and degrees of air-pollution damage; to change the model of the estimation of forest stand vitality or canopy defoliation respectively to a multi-criterion model, at least combined with the assessment of the load upon soils,
- to carry out a wide and thorough analysis and consequent prediction of current and potential risks in the forest protection and to update this outlook every fifth year with respect to the dynamics of observed phenomena,
- to carry out a complex analysis of impacts of stress factors aimed at the explanation of causes, mechanisms and consequences in individual cases of extreme symptoms causing disasters,
- to formulate principles and to propose procedures how to use the principles of integrated forest protection in individual cases of decision-making on the efficiency of application of defensive
interventions and curative measures and namely to set a threshold of harmfulness to forest management and of an impact on environment,

- to create an unified database for the monitoring and research programmes focused on the healthy status of forest stands,
- to involve other tree species (pine, oak and beech) in the monitoring activities within the programme ICP Forests (monitoring of the healthy status of forest stands in the net of research plots 16 x 16 km) at the level II.,
- to formulate principles and subsequently realize the zonation of forests according to its potential and in relation to the threatening by the complex effect of the direct influence of air pollution, depositions and climate,
- to intensify education of and co-operation with the public emphasizing the impact of anthropogenic factors on the forest,
- to solve questions of the damage caused to the forest and to forest owners by building and operating electrodects and other linear constructions.

**Maintaining forest cover to meet present and future needs**

5. Please indicate progress made and lessons learned in efforts to harmonize or to make compatible policy frameworks in your country (e.g. national forest programme or a similar policy framework for forests, biodiversity strategies and action plans, national action plans to combat desertification, etc.) that collectively address the full range of forest values.

6. Please provide information on recent efforts to assess long-term trends in national supply and demand for wood, non-wood forest products and services and whether your country’s national forest programme or similar policy framework for forests takes into consideration future needs for forest goods and services. Please provide views on how enhanced cooperation at the regional and international levels, including through UNFF, could further facilitate implementation of the IPF/IFF proposals for action

---

**Long-term trends in supply and demand for wood** As for supply of timber, the Forest Management Institute is now preparing the forecast study focused on the long-term scencarious of the development of growing stock volume, logging potentials and roundwood supply until 2050. These trends and scencarious should also be proved by the on-going National Forest Inventory (see below). On the other hand, the thorough study aiming at the long-term trends in demand for wood is still lacking.

**Data collection and dissemination on forest resources** Except for the regional plans of forest development, forest management plans and forest management guidelines, which had been the main source of information of forest resources so far, we introduced a new element last year - the National Forest Inventory - its main aim is to check the trends of the growing stock volume and increments, to verify either increasing or decreasing trend of fellings with regard to the tolerable volume of fellings. Other, but not less important, tasks of the project are to review the structure of forest land ownership, the extent and kinds of damage caused to forest by biotic or abiotic factors, the extent of forest regeneration and reforestation, the structure of forest stands, to improve the forest typology, to characterize forest ecosystems and to control status of the forest road system. During the process of national forest inventory the data are collected on the inventory plots creating the net 2 by 2 km so that it would be possible to repeat the measurement at the same plots whenever later on. The project is compatible with international standards. The Forest Management Institute has been charged with its realization. The first Forest National Inventory according to above mentioned principles is carried out now and its results will be known in 2004. The same observations will be repeated regularly every 10 years.
**Biodiversity strategy and action plan** The holistic Framework National Strategy of the Protection of Biodiversity including an Action Plan is now under preparation. However, the principles of the protection and enhancement of forest biodiversity have also been declared in the State Policy of Environment, the Conception of Forestry Policy, the State Programme of Nature and Landscape Protection, and most recently in the National Forest Programme.

**The National Forest Programme of the Czech Republic has proposed the following programme provisions to protect biodiversity and to promote forest management and planning on an ecosystem basis which are founded on:**

- inventory and genetic examination of original forest stands including the identification of endangered significant partial population, including inventory, genetic examination and revision of the forest stands certified for collection of seed, even for those species, for which gene bases are not declared,
- revision of gene bases of main forest tree species stressing the origin of forest tree species, decleration of gene bases according to EU rules,
- elaboration and realization of the programmes aiming at preservation and reproduction of gene pool with special respect to endangered genetic resources,
- completion of the on-going revision of the representativeness of forest ecosystems preserved in specially protected areas,
- up-dating of the current list of protected species of animals and plants in the respective regulation,
- elaboration of amendments to the current law, which will determine an exact definition and zonation of the geographically unoriginal species with respect to the biological, economic and ecological importance of certain introduced (exotic) species,
- involvement of the territorial protection of key habitats (from the point of view of biodiversity) in the site planning documentation at all levels,
- in urgent and reasonable cases, declaration of the forest stands outside national parks, national natural reserves and natural reserves, but in key habitats from the point of view of biodiversity as special purpose forests needed for maintenance of biological diversity according to the Forest Act and inclusion of these amendments in forest management plans and safeguarding their proper management having in mind respective compensations to forest owners for arising detriment,
- utilization of recommended framework principles of management for groups of forest types according to current and anticipated changes of site and forest stands’ conditions and with respect to demands of the public on the fulfilment of functions; moreover, in segments of territorial system of ecological stability to add all naturally occuring species (including those pioneer and scarce) to the species composition,
- safeguarding of subsidies covering the expenses which had to be paid by forest owners for the measures focused on the improvement of biodiversity in the managed forest stands,
- calculation of critical loads and categorization of lands from the point of view of the current and future acidification of forest soils as a background for supportive reclamation measures,
- establishment of the representative net of permanent research plots for the observation of natural succession,
- leaving certain old-grown trees (standing, namely den trees, but exceptionally also lying trees), i.e. biotops of birds, mammals, plants and microorganisms, which sholud gradually become a common method of forest management.

**III. Preparation of the Report**
This report has been prepared by the Ministry of Agriculture, Forestry Development Department in co-operation with the Ministry of Environment, Forest Protection Department. Nevertheless, the report is based on the conclusions of the National Forest Programme, which has been approved by the Government of the Czech Republic in January 2003. The NFP was widely discussed with various stakeholders as described at the beginning of the report.