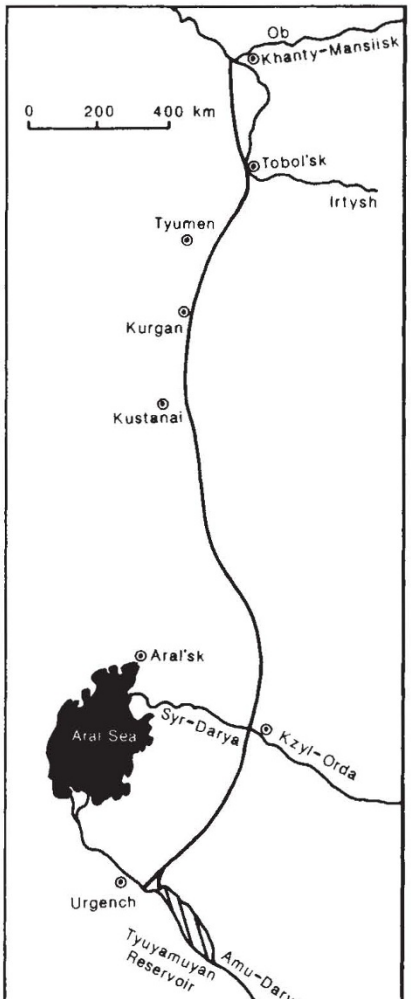
Soviet rivers

Ambivalently flows the Ob

SIBERIAN rivers, a favourite target of grandiose planning since the early days of Soviet rule, are no longer destined to "run backwards". Instead, a carefully calculated "part of the flow" will be channelled southwards, after possible "climatic and ecological changes" have been taken into consideration.



Massive hydroengineering projects, involving the imposition of the planners' will on nature, seem to appeal to the Soviets. In the 1920s, the need for such schemes was enthusiastically espoused by the propagandists of atheism on the grounds that, if God existed, He would have designed Siberia more rationally. In the 1930s, the construction of the White Sea Canal absorbed thousands of the victims of Stalin's purges and could be explained, if necessary, abroad, as "reeducation through labour".

In the early 1970s, the need to divert the Siberian rivers was used as an argument for peaceful nuclear explosions (an option since abandoned by treaty). But the international outcry in the 1970s against the possible effect of such diversion schemes on the Arctic, and indirectly on the weather worldwide, evoked, first of all, Soviet assertions that all ecological factors had been taken into consideration by the planners, and then somewhat later the launching of a major research project into the ecological consequences.

The inauguration of the long-term "Food Programme" in 1982 (the last major policy decision of the Brezhnev era) once again emphasized the need for a grandiose irrigation project in Siberia. (In fact, irrigation is needed not only for food crops but also for cash crops such as cotton, but Brezhnev's team emphasized the food aspect.) At the same time, the name "Sibaral" first came into common use.

A map of the proposed "Sibaral" canal was published only last August, in *Pravda Vostoka* (Eastern Trust), a paper not normally accessible in Moscow, let alone abroad. Even here, very few details were given. While the accompanying article spoke glowingly of the four great pumping stations needed to lift the water to the Tyumen' watershed, the map gives no indication of where these will be sited. It merely traces the proposed route of the canal at an undefined distance to the east of Tyumen', Kurgan and Kustanai, crossing the Syr-Darya somewhere to the west of Kzyl-Orda, and entering the Amu-Darya below the Tyuyamuyan reservoir east of Urgench.

Even more significantly, the *Pravda Vostoka* article reveals for the first time that there has been a major disagreement over the route. Since irrigation plans for Central Asia and Kazakhstan indicate that by 1987 the waters of the Syr-Darya and by 1995 those of the Amu-Darya will be totally consumed, there is every need to press ahead with the Sibaral, and in October 1984 the Plenum of the Central Committee of the CPSU brought the completion date forward to 1987. The task involves 6,000 million m^3 of earthwork and 15 million m^3 of concrete construction, to produce a canal 2,600 km long, 250 m wide and up to 12 m deep, with a flow of water of up to 1,150 m^3 per s. Moreover, the project appears to have been held up by a dispute between the planners and the scientists. According to *Pravda Vostoka*, 23 institutes of the Soviet Academy of Sciences and around 130 other research and design institutes have been involved in planning the Sibaral. Under their pressure, the planners have moved the canal route an unspecified distance eastward of the original track, where, it is claimed, it will have "no negative effect" on traditional agricultural systems, nature reserves and ancient forests, and will preserve animal migration routes. As well as pleasing the ecologists, the eastern variant has the support of the economists — the terrain, according to *Pravda Vostoka*, has considerably reduced the estimated construction and utilization costs. **Vera Rich**

Biosafety regulations

US at odds with OECD

Washington

THE Commissioner of the Food and Drug Administration (FDA), Dr Frank Young, has been strongly criticized by two US congressmen for failing to resolve an inter-agency dispute that is putting in jeopardy an international study attempting to develop uniform approaches to biotechnology regulation. A completely rewritten draft of the study report, produced by FDA, ignores agreements reached previously with other member countries of the Organisation for Economic Cooperation and Development (OECD), according to Representative John Dingell and Senator David Durenberger.

The OECD report should have been completed in June this year, but at a meeting in May in Paris the United States completely reversed its earlier approach, leaving other delegates wondering whether it was trying to scuttle the project. The report had been two years in preparation, under the chairmanship of Dr Roger Nourish of the United Kingdom's Health and Safety Executive.

Until the May meeting, the US delegation had been led by the Environmental Protection Agency (EPA). But FDA's biotechnology policy coordinator, Dr Henry Miller, was put in charge of the delegation after voicing strong objections to the direction the study was taking under EPA. Miller was actively opposed by EPA delegates in Paris, and the delegation "completely disintegrated", according to one observer.

The highly-charged quarrel between FDA and EPA mirrors an earlier dispute between FDA and the National Institutes of Health over guidelines for human gene therapy, which FDA lost. Young, and through him Miller, lost some political kudos when Margaret Heckler agreed to step down as Secretary of Health and Human Services, and FDA's hopes of leading biotechnology policy-making are now open to question.

The May draft of the OECD study, produced when EPA was still in charge of the US delegation, devotes much space to descriptions of standard levels of containment and lays much store on flexibility, but gives no indication of how knowledge about possible hazards should be used to decide on appropriate containment levels. It lists only information that should "ideally" be taken into account. Some reviewers criticize it for being prescriptive, although almost the only firm recommendation is that viable engineered organisms used in industry be kept in closed systems. Most agree that the study was seriously flawed; opinions vary over whether it was rescuable.

The new FDA-inspired September