KAZHYDROMET-
NATIONAL HYDROMETEOROLOGICAL SERVICE
OF REPUBLIC KAZAKHSTAN

ASTANA, 2010

The ministry of preservation of the environment of Republic Kazakhstan The republican State Enterprise «Kazhydromet»

Main objective of activity of RSE “Kazhydromet " is maintenance with the information on weather, a climate and a state of environment, notifications about the dangerous and spontaneous meteorological, agrometeorological, hydrological phenomena and extremely high levels of environmental contamination, maintenance of high level of hydrometeorological and ecological safety of the country.

Primary goals of RSE “Kazhydromet ":

1. Working out and drawing up of all kinds of hydrometeorological forecasts;
2. Carrying out of regular hydrometeorological and ecological supervision;
3. Preventions of possibility of occurrence of the spontaneous hydrometeorological phenomena;
4. Conducting of Republican fund of the data on hydrometeorology and environmental contamination;
5. Hydrometeorological maintenance of branches of economy of Republic Kazakhstan.

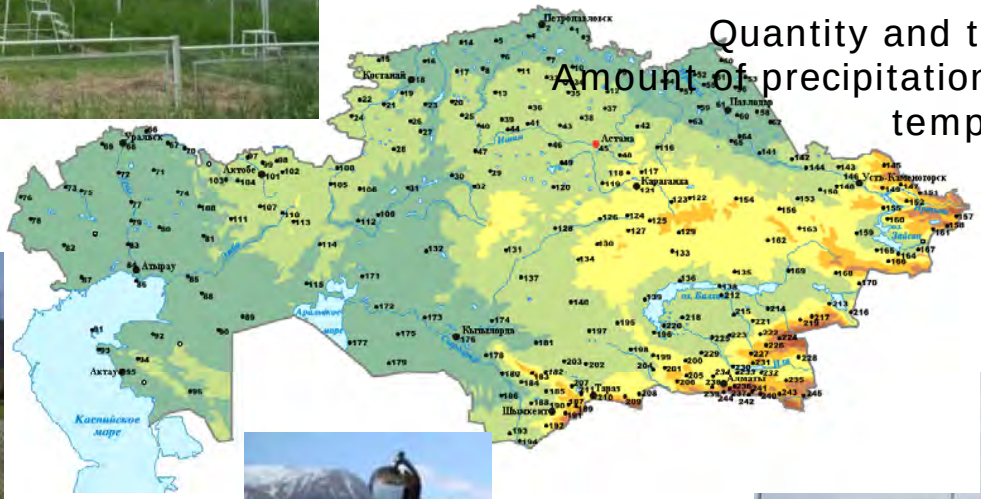
THE INTERNATIONAL COOPERATION

The basic directions:

- The world Meteorological Organization (WMO)
- Regional Associations II (Asia) and VI (Europe) WMO
- Interstate Council about Hydrometeorology (ICH)
- Bilateral and multilateral Agreements in the field of hydrometeorology
- The international courses, trainings, educational seminars

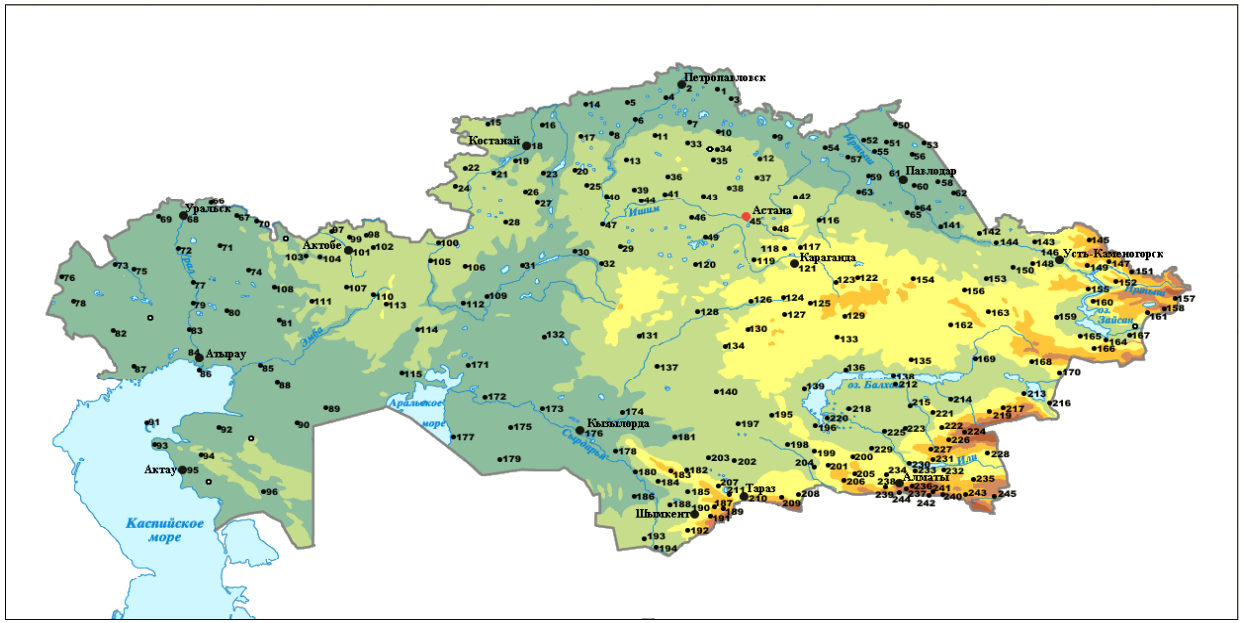
Observant network of Kazhydromet

Meteorological station
Makes supervision over temperature and humidity of air,
Direction and in the speed of a wind, atmospheric pressure,
Meteorological visibility range,
the height of the bottom border of clouds,
Condition of weather,
The atmospheric phenomena,
The dangerous and spontaneous phenomena,
Quantity and the form of clouds,
Amount of precipitation, condition and in temperature spreading
Soil surfaces.



CONDUCTING METEOROLOGICAL MONITORING

The land meteorological network of Republic Kazakhstan includes 259 meteorological stations.



On structure meteorological stations are subdivided on:

- stations of the international exchange (65 MS);
- stations of a global network of supervision over a climate (16 MS);
- reference climatic stations (33 MS);
- stations of an interstate hydrometeorological network of commonwealth of the independent states (159 MS).

ACTINOMETRICAL OBSERVATION

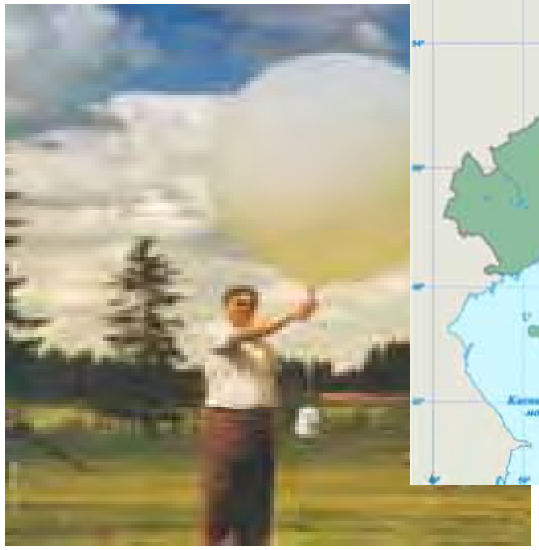
At 12 meteorological stations are spent actinometrical observation – observation over intensity of the straight line disseminated, total solar radiation, and also over effective radiation, radiating balance.

OZONOMETRICAL OBSERVATION

Observation over the general maintenance of ozone in atmosphere are spent at 5 stations – Almaty, Aral sea, Atyrau, Karaganda, Semipalatinsk.

Upper-air Observations

One of the major directions of activity of hydrometeorological service are the aerological observation intended for data acquisition about the basic meteorological sizes of atmosphere (temperature, pressure, relative humidity of air, a direction and speed of a wind) at standard and special levels to heights of 30-40 km. The aerological information from 8 stations is used for studying of atmospheric processes, weather forecasts, and also service of consumers.



RADAR MARL-A

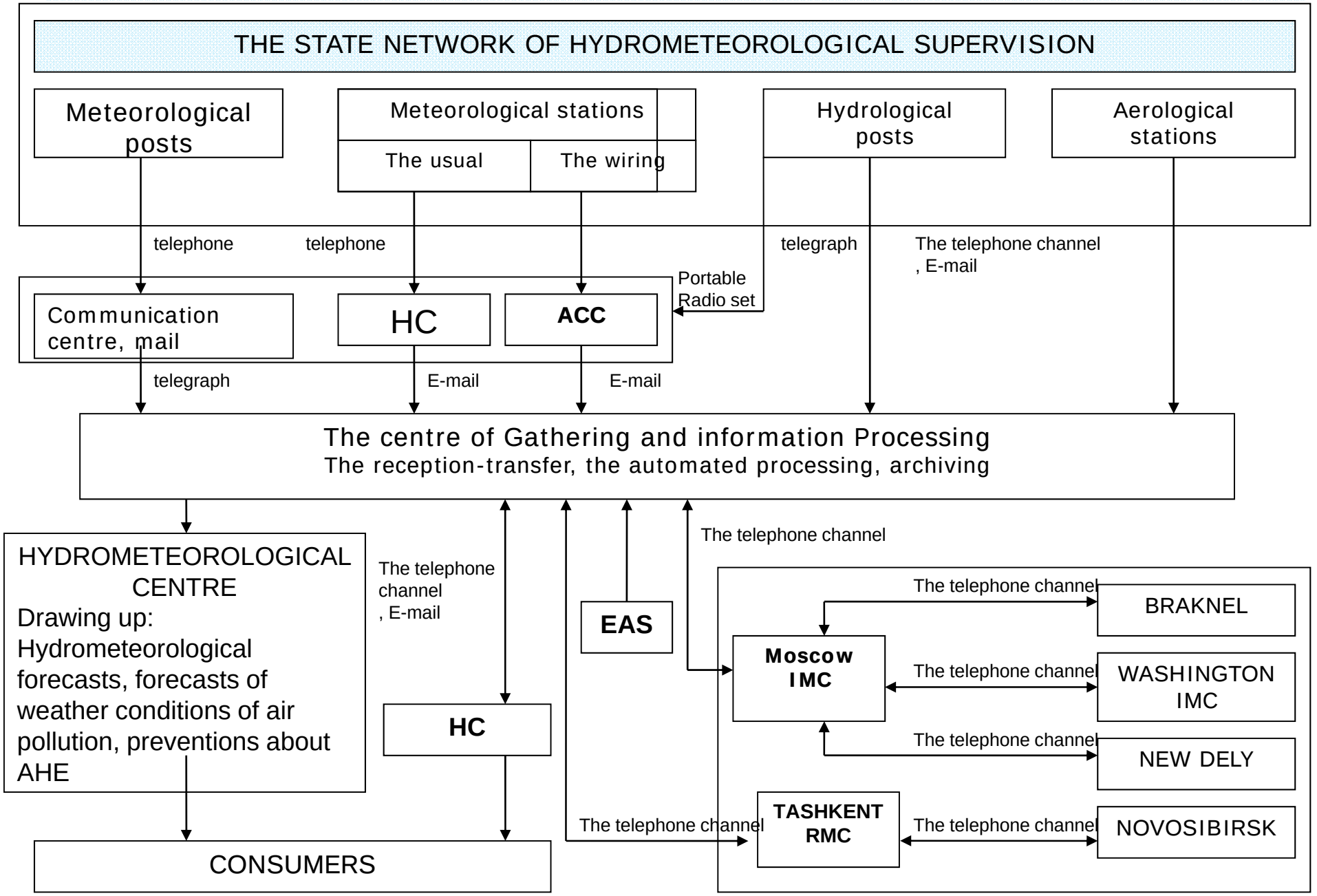
Microelectronic aerological radar (MARL-A)
It is intended for work as a part of small-sized system of network aerological sounding and carries out following functions:
Tracking angular co-ordinates and range of the radiosonde let out in free flight;
Reception of the telemetering information from a radiosonde about meteorological data of atmosphere (temperature, humidity) in a flight point;
Calculation of speed and wind direction;
Formation of standard meteorological telegrams.

Into structure MARL enter as actually radar equipment (in drawing - without radio transparent shelter), and the operating COMPUTER and the software of secondary processing of the information.

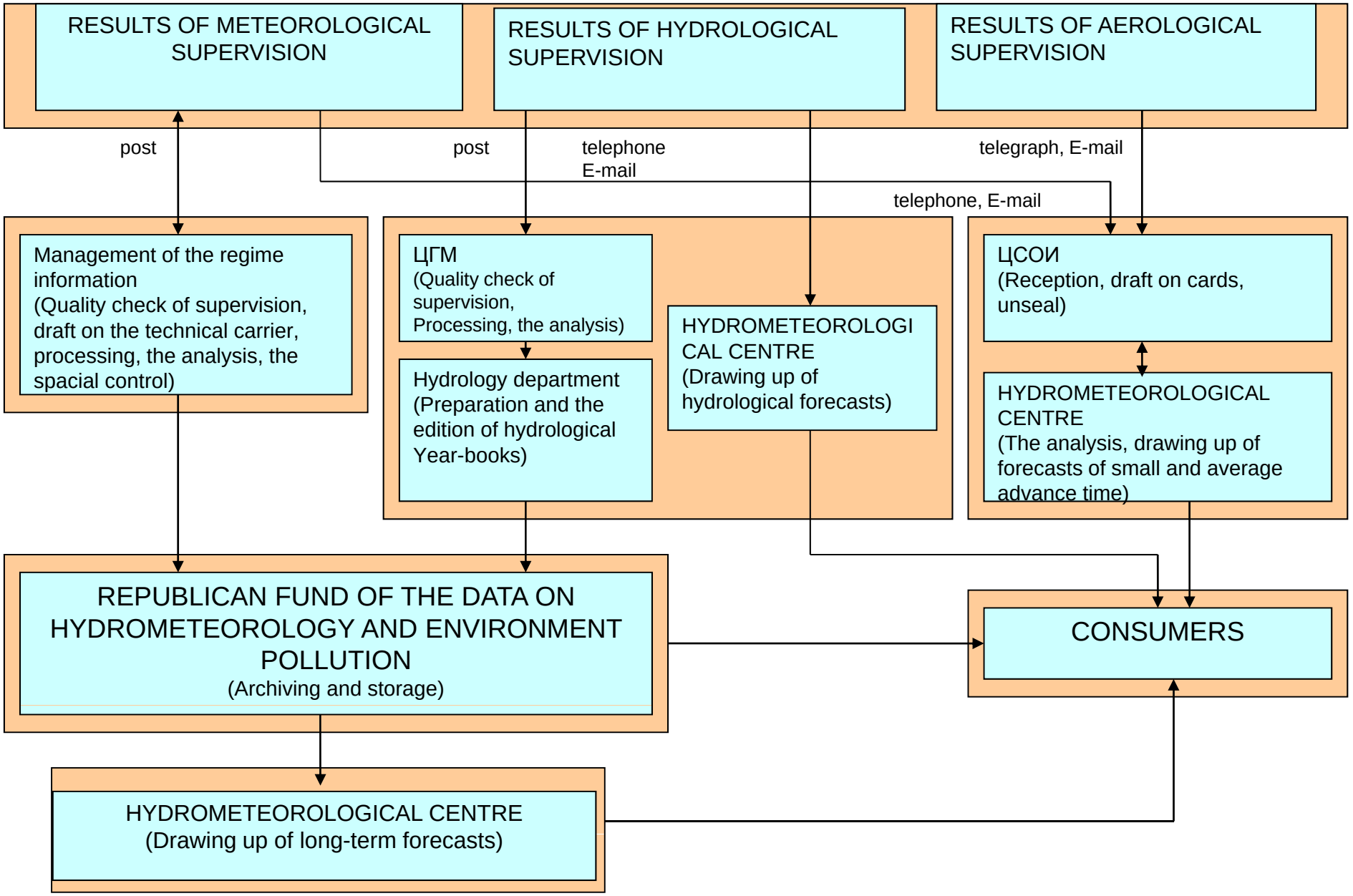
RADIOSOUNDING OF ATMOSPHERE AC-1

System "AC-1“ (automatic centre) is intended for temperature-wind or wind radio sounding of atmosphere with automatic data processing and delivery of aerological telegrams.

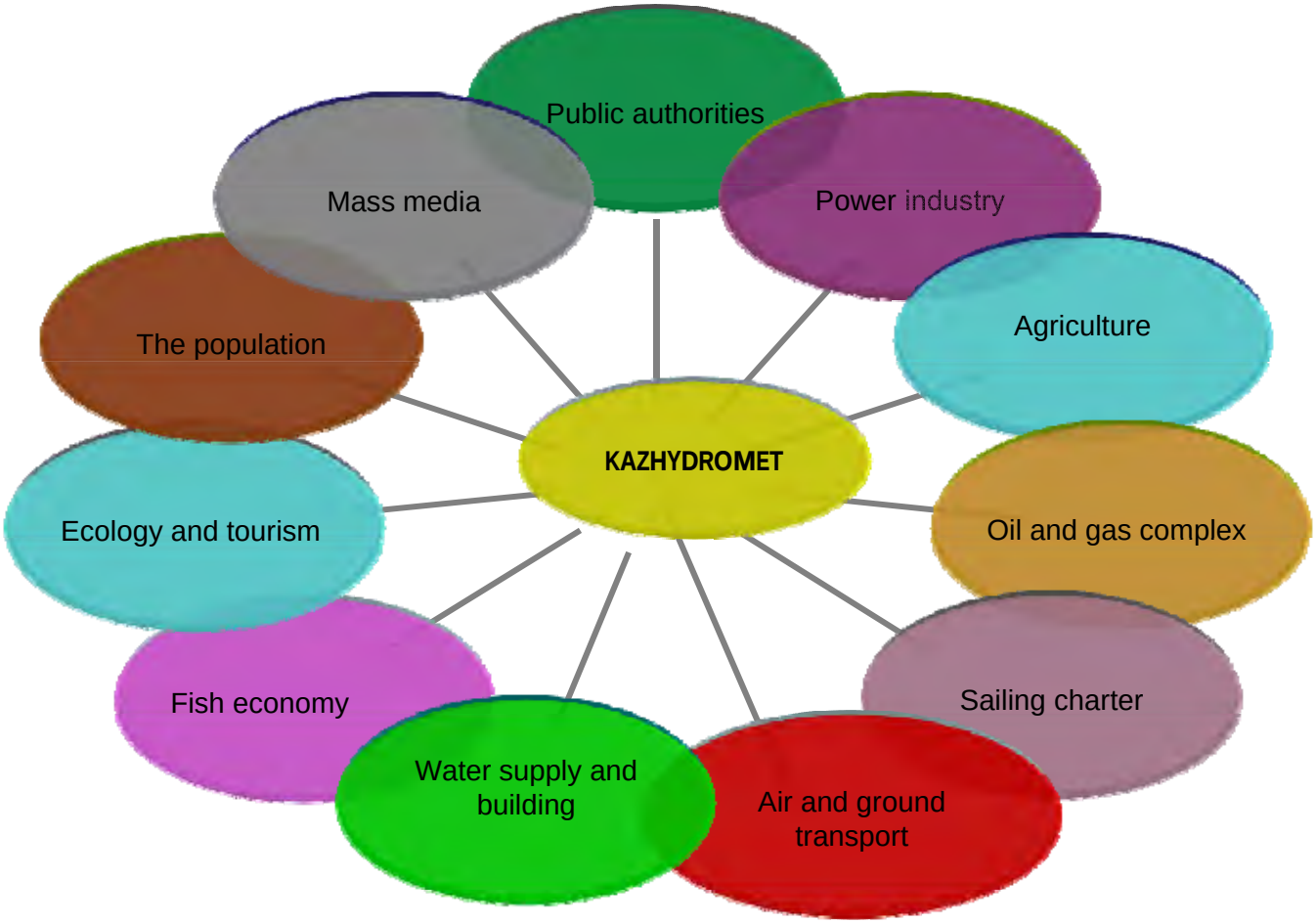
GATHERING-TRANSFER OF THE OPERATIVE HYDROMETEOROLOGICAL INFORMATION



GATHERING AND PROCESSING OF THE REGIME HYDROMETEOROLOGICAL INFORMATION



Consumers of the hydrometeorological information



Thanks for attention