Exercise 99

Here is a conversation between an administrative manager and a communications engineer. Transform it into indirect speech. Use past tenses. Make all the necessary changes. Ask your neighbour ten questions connected with the text received. Retell the text.

Administrative manager (Ad. M.):

     So you think we should change the system?

Communications engineer (C. Eng.):

     Yes, I do. We're having a lot of problems with the existing configuration.

Ad. M.: So, what do you suggest?

C. Eng.: Well, at the moment we're using a modem linked up direct to our microcomputer and the telephone line. Very simple, in theory we send files from our computer direct to our clients' computers using a software package called 'Communicate'.

Ad. M.: OK ... Well, sounds fine. What's the problem?

C. Eng.: Well, the weak link is the line. As you know a lot of our clients are overseas and we are having problems with the lines. The files are being transmitted but they are not arriving in the same form. The data are being corrupted.

Ad. M.: What does that mean?

C. Eng.: Well, say we send a 10 page contract to a client in France. We make the connection, start transmitting and then there's a fault on the line and they receive the contract with some parts missing, or parts they can't understand

Ad. M.: That sounds bad.

C. Eng.: Even more serious is that it's costing us a lot of money in call charges. Call charges on international lines are high and each time we send a report or contract - let's say 10 pages long - it takes up to 5 minutes to transmit - longer if we have problems with the line.

Ad. M.: Yes, that is serious. So what do you suggest?

C. Eng.: Well, I think we should use an electronic mailbox.

Ad. M.: How does that work?

C. Eng.: Very simply really. We subscribe to a service called DIALCOM. We send our files to a central computer. The files are stored there and our clients can get the file out when they

want. We use our existing equipment and so we only have to pay for the subscription and the call charges.

Ad. M.: How expensive is it?

C. Eng.: It's cheaper, but more important - the system uses a data network, not the normal telephone lines; so transmission is faster and more reliable - there's less chance of the data being corrupted.

Ad. M.: Alright, I think we should go ahead.

Exercise 100

Here is a telephone conversation between two managers.
Write a brief message to their chief telling him the details of this conversation. Use the following pattern: Jim spoke with Chris yesterday. He asked Chris...

Jim: Hi, Chris. It's Jim here. I'm calling about the Saudi project ... to find out how the work's coming along.

Chris: Not bad, we're mostly on schedule.

Jim: Has all the equipment been installed?

Chris: Yes, we finished installation last week. We start testing the machine on Monday next week.

Jim: How long will that take?

Chris: Well, the operator training has already started. We kicked off on Wednesday this week and the first course ends next Friday.

Jim: Oh yes, that was one of the things I wanted to mention. Fred Hyman, the maintenance trainer should arrive at the weekend.

Chris: Fine, do you know what time?

Jim: No, but I expect he'll arrive at 12 on Saturday. I'll telex you as soon as I know for certain.

Chris: OK. Anyway he'll have a week before he starts training. The first maintenance course is due to begin a week from Monday.

Jim: When do you plan to finish the training programme?.

Chris: Just a moment. I'll look at the planner... here it is, urh, ... the last course is in July – that's the supervisors ' course – if all goes well that'll finish at the end of the month and they'll be ready to start work at the beginning of August.

Jim: So you plan to start up in August?

Chris: Yes, if all the tests are OK, we've got a provisional start-up date
  on 25th August ... for the first two weeks we'll be building up
  capacity slowly ... hope to reach full capacity by September 8th.
Jim: Sounds fine. Anything you need?
Chris: Um. I don't think so. Thanks Jim.
Jim: You're welcome. Speak to you again soon. .
Chris: Yes, Bye.
Jim: Bye.

Unit 17
Модальные глаголы

Модальные глаголы не имеют многих глагольных форм:

1 ф. 2 ф.	отрицательные формы
Can – could	cannot = can't, could not = couldn't
Must	must not = mustn't
May - might	may not, might not = mightn't
Should	should not = shouldn't

В неопределенной форме перед ними не употребляется
частица to , в 3-м лице единственного числа настоящего времени
они не имеют окончания s, инфинитивы, стоящие после модальных
глаголов, употребляются без частицы to.
We can speak English a little.
My brother should help me do my hometask.
Every student must study well.

В большинстве случаев форма could (мог) является простым
прошедшим временем от can (мочь):
I can swim.
I could swim when I was 10.

Could (могли бы) может также использоваться для
обозначения возможного действия в настоящем и будущем, в
особенности для внесения какого-либо предложения:
The weather is fine. We could go to the country.

Unit 16
Согласование времен. Косвенная речь

He promised that the conference would be ready for us when we arrived.
He said that they had signed the contract.
She says that we have a deal.

Если сказуемое в главном предложении выражено глаголом в настоящем или будущем времени, сказуемые придаточных предложений не претерпевают никаких изменений.

Если сказуемое в главном предложении выражено глаголом в прошедшем времени, времена глаголов-сказуемых придаточных предложений претерпевают следующие изменения:

present ——— past;
past ——— past or past perfect;
will ——— would.

Например:
She says: 'The policy of the government has changed.' She says that the policy of the government has changed.
She said: 'The policy of the government has changed.' She said that the policy of the government had changed.

При переводе из прямой речи в косвенную изменения претерпевают некоторые местоимения и наречия:

Прямая речь	Косвенная речь
I/you	he/she
we/you	they
we/you	him/her
us/you	them
yesterday	the day before/the previous day
today	that day
tomorrow	the day after/the following day
last ...	the previous ...
next ...	the following ...
this ...	that ...

Исключение:

Время глагола-сказуемого не меняется, если сказанное все еще является правдой.

She said: 'The date of the next meeting hasn't been fixed yet.'

She said that the date of the next meeting hasn't been fixed yet.

(They haven't decided about it by the moment of speech).

При переводе из прямой речи в косвенную помимо глагола "say" рекомендуется употреблять такие, как: add, agree, announce, answer, claim, comment, declare, emphasize, explain, highlight, imply, indicate, inform, prove, reply, report, reveal, show, state, stress, suggest, tell.

При переводе вопросов из прямой речи в косвенную порядок слов в них становится прямым, так как вопросы в этом случае превращаются в обычное придаточное предложение:

She asked: 'Have you increased the quality of products?' She asked if we had increased the quality of products.

Exercise 98

Below is an extract from a newspaper report.
Complete the spaces with an appropriate form of one of the verbs from the box.

> warn, believe, say, remind

The Minister ___ the audience that 20 years ago things were very different. He ___ the time had come to face realities and he ___ we had to choose between cooperation or isolation. He ___ that major problems would arise if we made the wrong choice.

downstream rates than would occur if two identical computers were used.

57. The T1 integrator, which is housed at the customer site, can be programmed to handle any combination of DS-o (64 kbit/s) channels for voice and data; for instance, a customer can dedicate 16 of the 24 DS-os channels that make up T1 access line voice traffic, which the other eight DS-os dedicate to data and Internet access.

Unit 30
Что такое резюме?

Резюме – краткое изложение сути написанного, сказанного или прочитанного; краткий вывод, заключительный итог чего-либо.

Целевое назначение резюме разнообразно. Его функции следующие:

1. Резюме отвечает на вопрос, какая основная информация заключена в рассматриваемом источнике.
2. Дает описание первоисточника.
3. Оповещает о выходе в свет и о наличии соответствующих работ.
4. Является источником для получения справочных данных.

Резюме является также одним из самостоятельных средств научной информации.

В резюме не используются доказательства, рассуждения и исторические экскурсы. Материал подается в форме описания фактов или консультации. Информация излагается точно, кратко, без искажений и субъективных оценок. Краткость достигается во многом за счет использования преимущественно терминологической лексики. Резюме, как правило, включает следующие части:

а) библиографическое описание первичного документа;

б) текст резюме;

в) справочный аппарат, т.е. дополнительные сведения и примечания.

Текст резюме рекомендуется строить по следующему плану:

а) цель и методика исследования или разработки;

б) конкретные данные о предмете исследования или разработки, его изучаемых свойствах;

в) временные и пространственные характеристики исследования;
г) результаты и выводы.

Заглавие резюме не должно повторяться в тексте. Следует избегать лишних вводных фраз.

Примерный объем резюме находится в пределах 1/8 или 10-15% объема статьи. При необходимости объем может быть больше указанного.

Исходный текст для резюме

The End of A Monopoly Era

The GSM community is fond of talking about the benefits of competition. Competition between operators is said to be good. Competition between handset suppliers is said to be good. And competition between infrastructure suppliers is said to be good.

The irony of this is that throughout the first half of the 1990s GSM was itself a virtual wireless technology monopoly. Japan got a good Second Generation digital system up and running in the form of PDC. But it then found that a combination of the frequency band it operates in, and inflexible commercial acumen on the part of Japanese suppliers, meant that it could not succeed outside Japan. For it's part, North America floundered between fledgling TDMA and IS-95 CDMA systems. Neither of them looked like succeeding in the United States, let alone anywhere further afield.

During the first five years of commercial deployment, GSM has enjoyed startling success. But it has only done so by virtue of being the only credible Second Generation technology on the market. That comfortable position has changed during 1996 with the posing of the first serious challenges by alternative technologies. IS-95 CDMA has got off the ground and is alive and commercially kicking at last in the Far East and in the United States. IS-136 TDMA now looks like a far more serious option than IS-54. And Japan's cordless PHS has clearly stolen the wireless limelight from GSM with its extraordinary take-up rates. All of a sudden, the world looks like a different place. GSM can no longer assume continued success on the same scale as before. It is no longer the only credible digital wireless solution.

This new reality necessitates a change of strategy on the part of the GSM community. The first thing which has to go is the negative mindset which some Europeans have had towards other digital technologies. True, some of the marketing of IS-95 has been highly derogatory about GS. But now that that seems to have peaked, there is no point pretending that the alternatives to GSM are not a lot more credible than they were a couple of years ago.

In any case it is childish to deny the hugely positive impact which the rise of these rivals has had on the GSM standard. But for the threat posed by IS-95, it is doubtful whether PCS-1900 operators in the US would have pushed so hard for an enhanced 13kbits/s vocoder – an enhancement which other GSM operators world-wide are now able to benefit from. It is also doubtful whether the migration towards Phase 2+ would now be moving as fast as it is were it not for the GSM camp's need to stay ahead of the game in the value added service, data and information stakes.

Faced with a new competitive landscape, the GSM community also needs to be more thorough in its marketing. The IS-95 camp have been pushing themselves as much – if not more – as wireless local loop suppliers. The GSM community, by contrast, has done very little to position itself for wireless local loop.

The evolution of regulatory and standardization policy for GSM has become a little less Euro-centric but it is still too wrapped up in the blue and yellow of the European Union. The American Way has definitely been a positive influence in the last couple of years. The doors should be opened still wider. Asia's GSM operators are also key to GSM's future. Regrettably, the only Asian countries with sufficiently powerful and outward looking telecomms policy bodies are Japan and Korea, both of which are outside the GSM camp.

1997 opens a new chapter - a Phase Two so to speak – in GSM's development. Europe's technology has done fantastically well without any real rivals. Now it must do just as well in the face of real competition.

Patrick Donegan GSM World Focus 1997, p.7

Резюме

Donegan P. The End of Monopoly Era. GSM World Focus, 1997, p. 7

The End of Monopoly Era

The aim of the article is to show the reader that real competition in the GSM field is now a reality and should be faced both by reducers and operators.

The research method used in the article is description.

Recognizing that in the first half of the 1990s GSM was a virtual wireless technology monopoly the author admits that nowadays that situation has changed dramatically due to the appearance of alternative technologies such as IS-95 CDMA, IS-136 TDMA, PHS.

This new reality leads to change of strategy in the GSM community. Measures should be taken to let some Europeans' negative mindset towards other digital technologies go and to become more thorough in marketing; the doors should be opened for America's and Asia's GSM operators.

The article describes the period of GSM's development beginning with the first half of the 1990s and ending with 1997 which was mainly a Europe-centric one.

The author's conclusion is that GSM's development has entered a new chapter, i.e. the phase of competition. And it's up to GSM's technology to do as well in the face of real competition as it did without any real rivals.

Exercise 170

Read the following text and do the tasks given after it.

Data Communications, June 1997, A4-A5

Solving the SNA and LAN Problem Using Frame Relay
by Robin Leyland

SNA networks are stable and reliable, and the business world depends on them. LANs are growing but require high maintenance. At first glance, combining the two into one integrated network seems like mixing oil and water, but this is exactly what network managers are under pressure to do. The reason is simple: Maintaining, installing, and man-

Text 3
Read the text and follow the instructions.

Switching Technology

The PSTN we have been describing has a star configuration. Local loops (usually one per subscriber) terminate in a CO. This CO completes connections from one local loop to another local loop, or from one local loop to a trunk that terminates on some other CO. This CO has gone through a number of fundamental technological changes (see Table 1).

Table 1. Types of End-Office Switching and their Evolution

Switching System	Operation	Method of Switching	Type of Control	Type of Network
1878 manual operator	manual	space/analog	human	plug/cord/jack
1892 step-by-step	electrome-chanical	space/analog	distributed stage-by-stage	stepping switch train
1918 cross-bar	electrome-chanical	space/analog	common control	X-bar switch
1960 ESS-first generation	semielectro-nic	space/analog	common control	reed switch
1972 ESS-second generation	semielectro-nic	space/analog	stored program control	reed switch
1976 ESS-third generation	electronic	time/digital	stored program common control	pulse code modulation

The manual system required, of course, constant attention from operators. In the late 1800s, telephone calls were connected manually at the CO. When a call came in, an attendant would plug into a horizontal bar line. He then would yell to the operator who handled the customer being called, and that second operator would connect to the bar and finish setting up the call. When the call was completed, another operator would yell to all in the room that the line was clear again. The step-by-step system, which is still in operation in many parts of the country, utilized what is known as the Strowger switch. The intelligence in the system was located in relays mounted on each switch. The switch itself responded to the dial pulses of the rotary dial.

The crossbar system was still electromechanical in nature, but the intelligence of the system was separated from the actual switch. Thus, this common control could be used repeatedly to set up and tear down calls and never sit idle.

When electronics came along, the electromechanical control of the common control system was replaced with electronics, and the network, or matrix, was usually replaced with tiny glass-encapsulated reed switches. Hence, only a part of the switch was electronic. In the next generation, the stored program operation of a digital computer was applied to the switch, although the network remained a complex of reed switches. In the final generation, called a digital switch, the talking path was no longer an electrically continuous circuit; rather the speech being carried was digitized into a stream of "1s" and "0s". Notice that this final generation depicted a significant change from the previous generations in that there was no longer an electrical talking path through the switch. We were, in fact, operating in a digital (rather than analog) domain.

However, whether the system was analog or digital, one thing must be recognized: there was an actual talking path – a circuit – from the calling party to the called party. This talking path was established at the beginning of a call and held for the duration of a call. We call it circuit switching. This system is not actually efficient. When I am talking, you are listening, and the circuit is being used in only one direction – that is, 50 percent. When you are talking and I am listening, it is still 50 percent. When neither of us is talking, or when there is silence between words, the efficiency is 0 percent.

There is, however, a different kind of connection, and we see it today in a number of applications:
- credit-card verification;
- automated teller machine;
- SS7;
- Internet and the World Wide Web.

This system is called packet switching (as opposed to circuit switching). In a packet-switching system, the information being transmitted (be it data or digitized voice) is not sent in real time over a dedicated circuit; rather it is stored in a nearby computer until a sufficiently sized packet is on hand. Then a very smart computer seizes a channel heading in the general direction of the destination, and that packet of data is transmitted at very high speeds. Then the channel is released. So, except for some necessary supervisory information (destination, error checking codes, etc.) the channel is 100 percent efficient. When the distant station gets that message no more than a few milliseconds later, it responds with the necessary handshaking information – again, by accumulating a packet of data, seizing a channel, and bursting the information out over that channel. Again, 100 percent efficient.

As mentioned earlier, the packet networks in the world (actually overlay networks to the PSTN) are being used extensively for data; only recently are we

seeing them being used for voice. As systems are perfected, this also will change.

Task 9
Find all the terms and abbreviations given in the text, write them down and give their meanings.

Task 10
Give a written translation of the extract beginning with "When electronics came along ..." and ending "... in a digital (rather than analog) domain" and the extract beginning with "This system is called packet ..." and ending "... 100 percent efficient". While making your translation you may use a dictionary.

Task 11
Make up a plan of the text. Retell it using your plan.

Text 4
Read the text and find the endings of the following sentences in it. Translate them into Russian.

1. Technically known as unshielded ...
2. However, this is the way ...
3. These load coils ...
4. For example, a drop wire ...
5. Usually an outer insulating cover ...
6. Whereas transmission over copper ...
7. However, if a local loop ...
8. The message is clear ...
9. With single-mode fiber ...
10. Most of the disruptions ...
11. With microwave there is no ...

Transmission Media

There are four types of media that can be used in transmitting information in the telecommunications world:
- copper wire;
- coaxial cable (actually an adaptation of copper wire);
- fiber;
- wireless.